

#4

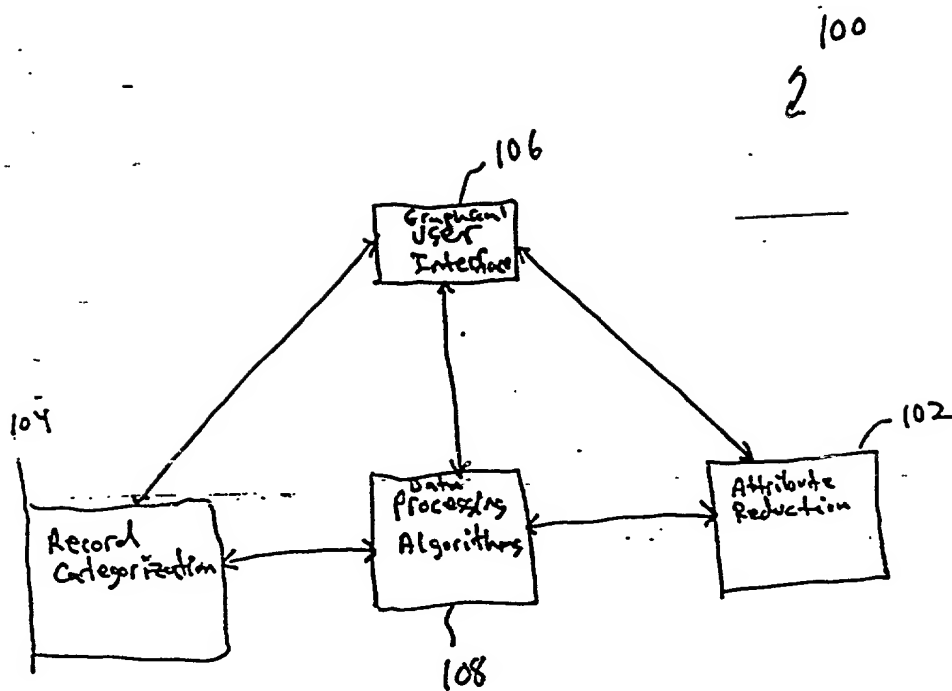


Figure 1

2007692-06402

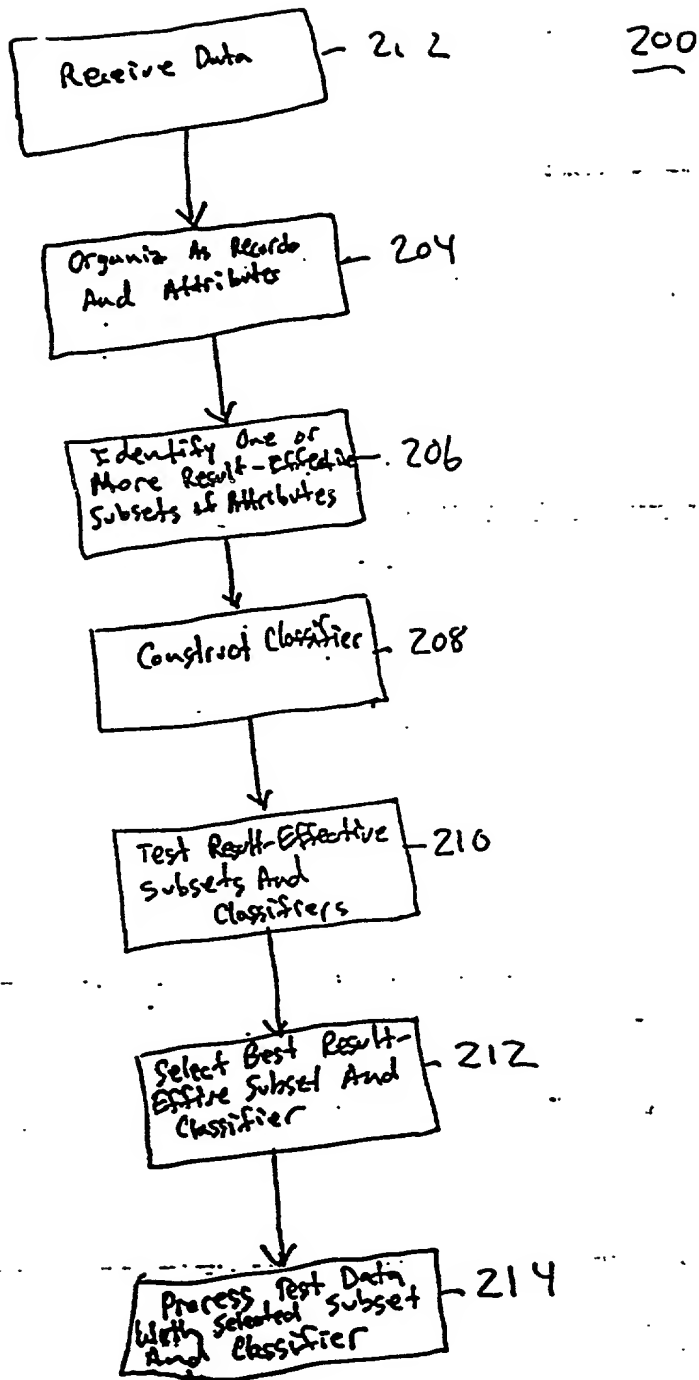


Figure 2

The diagram shows a data structure with 16 variables, labeled Variable 1 through Variable 16, arranged vertically. A horizontal line labeled 304 is positioned above the variables. A vertical line labeled 308 is positioned to the left of the variables. An arrow labeled 302 points to the vertical line 308. The entire structure is enclosed in a rectangular box.

22/8917

Figure 3

# Variable 4

Variable 1		Variable 2	Variable 3	Variable 4	Variable 5	Variable 6	Variable 7	Variable 8	Variable 9	Variable 10	Variable 11	Variable 12	Variable 13	Variable 14	Variable 15	Variable 16
B	D	F	2080	88	B	1.98	1.80	A	0.30	1.53	1.95	0.95	3.33	485		
A	A	B	1600	96	D	2.65	2.33	A	0.25	1.93	4.70	1.04	3.59	1035		
B	D	F	1900	92	B	2.36	2.04	A	0.39	2.08	2.70	0.86	3.02	312		
A	A	A	1850	101	C	2.80	3.24	B	0.30	2.81	5.68	1.03	3.17	1185		
A	A	B	2250	86	B	1.45	1.25	A	0.50	1.63	3.60	1.05	2.65	450		
B	D	E	2200	80	B	1.65	2.03	B	0.37	1.63	3.40	1.00	3.17	510		
B	D	F	1900	98	C	2.45	2.43	A	0.29	1.44	4.25	1.12	2.51	1105		
A	A	B	1800	94	C	2.45	2.59	A	0.22	2.29	5.60	1.24	3.37	1265		
A	B	C	1720	85	B	2.60	2.65	B	0.37	1.35	2.76	0.86	3.28	378		
B	D	F	2100													

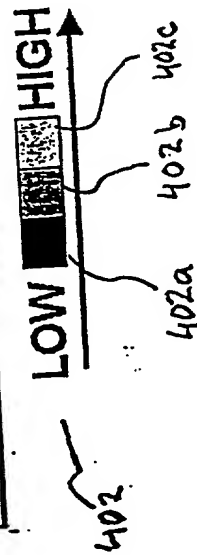


Figure 4A

2218917



# Variable 2

400

406

B	1.99	20.80	86	B	1.98	1.60	A	0.30	1.53	1.95	3.33	485
A	2.21	16.00	96	D	2.65	2.33	A	0.28	1.98	4.70	3.59	1035
B	1.94	19.00	92	B	2.36	2.04	A	0.39	2.08	2.70	3.02	312
A	2.57	18.60	101	C	2.80	3.24	B	0.30	2.81	5.68	3.17	1185
A	2.70	22.00	101	C	1.45	1.25	A	0.50	1.53	3.60	2.65	450
B	2.42	22.00	86	B	1.55	2.03	B	0.37	1.63	3.40	3.17	510
B	2.12	19.00	80	B	2.45	2.43	A	0.29	1.44	4.25	2.51	1105
A	2.55	18.00	98	C	2.45	2.99	A	0.22	2.29	5.60	3.37	1255
A	2.60	17.20	94	C	2.60	2.65	B	0.37	1.35	2.76	0.86	378
B	2.17	21.00	85	B	2.60							

LOW HIGH

402

402a 402b 402c

Figure 4B

306

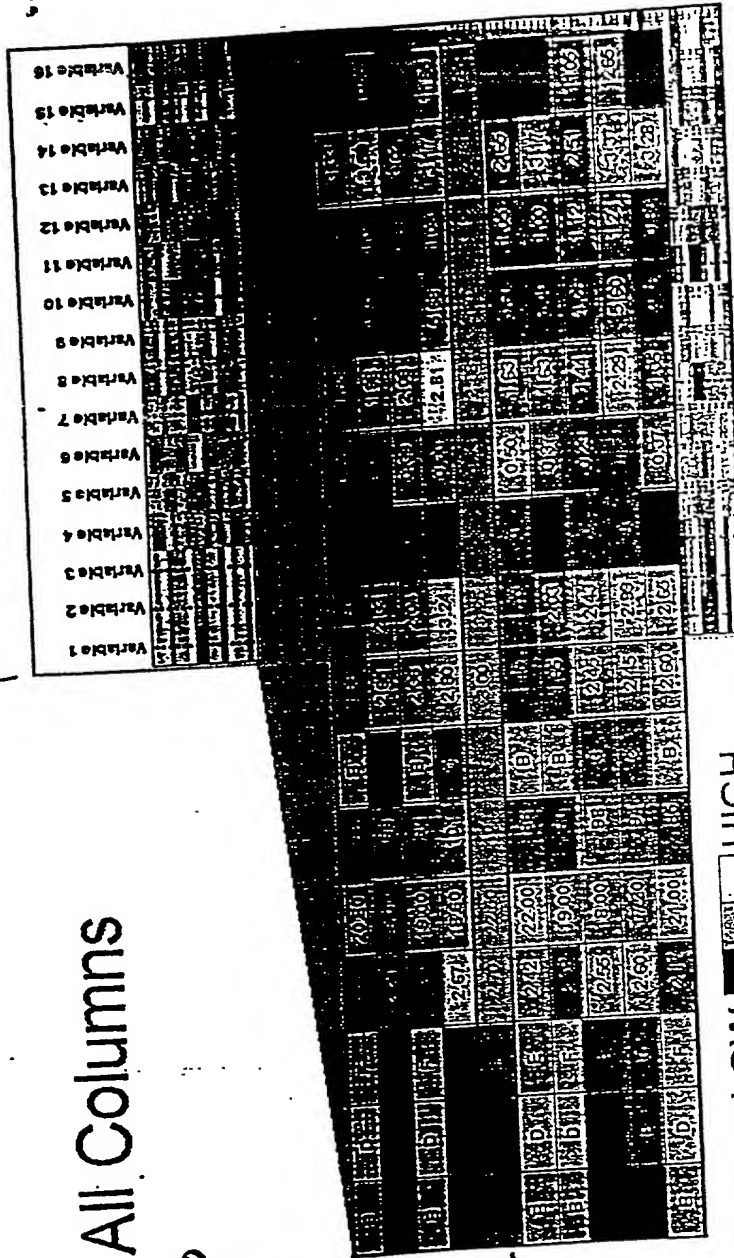
2218517

304

# All Columns

400

304



308

LOW HIGH

402

402a 402b 402c

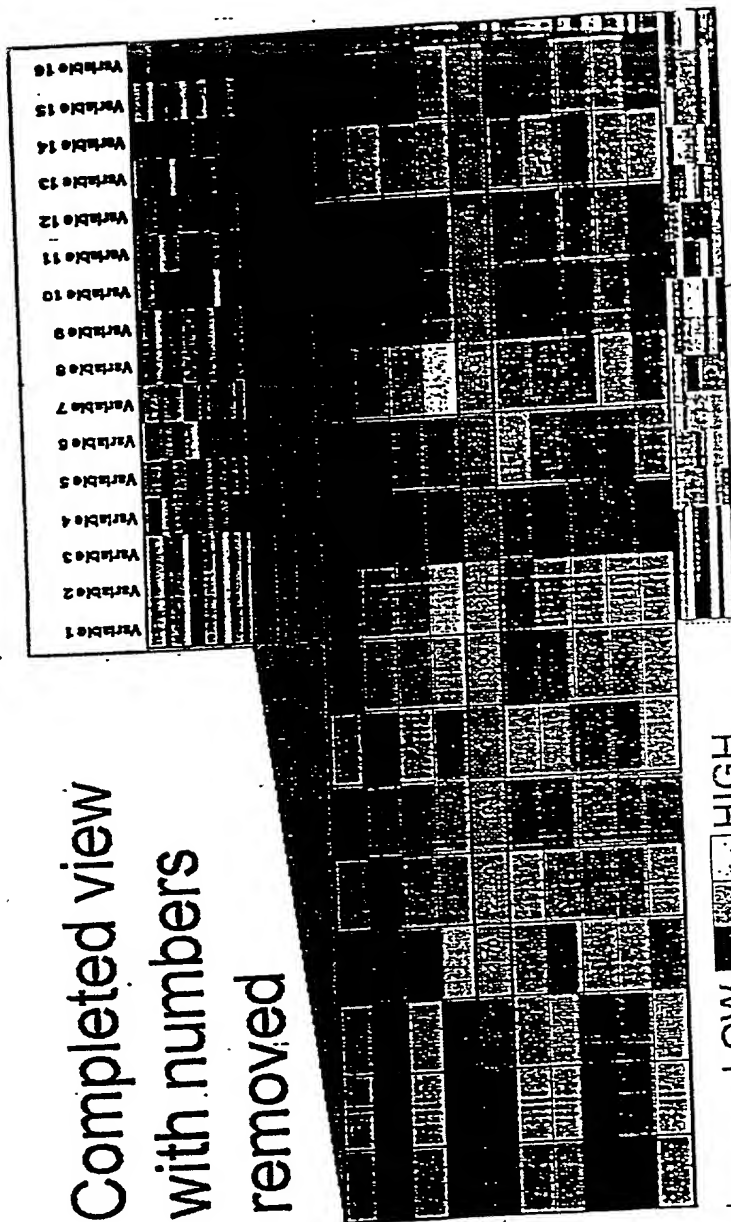
Figure 4C

306

304

Completed view  
with numbers  
removed

308



LOW HIGH

402

402a 402b 402c Figure 4D

306

2218917

# Ideal Case

500

Random

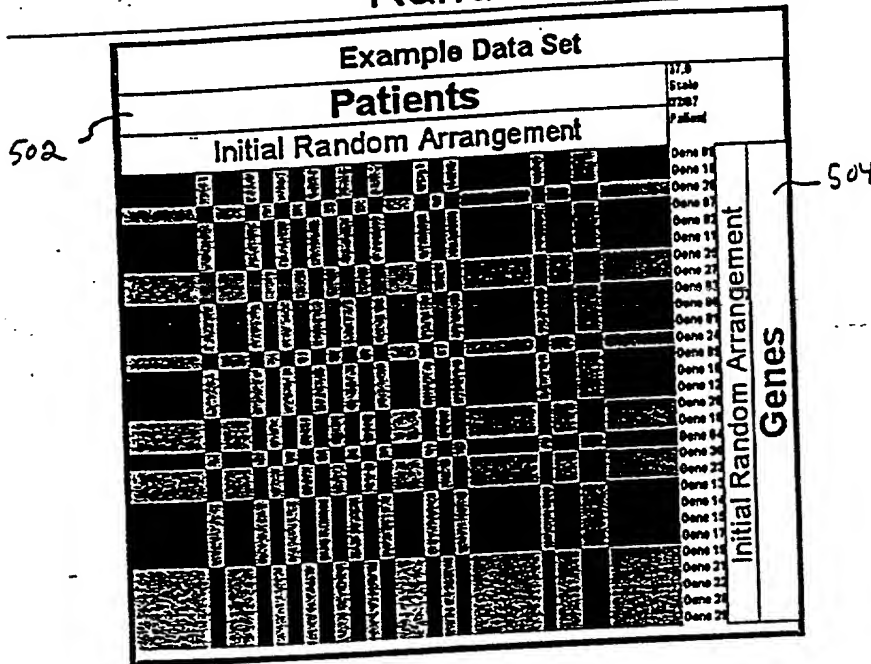


Figure 5A

# Ideal Case Sorted by Patients

500

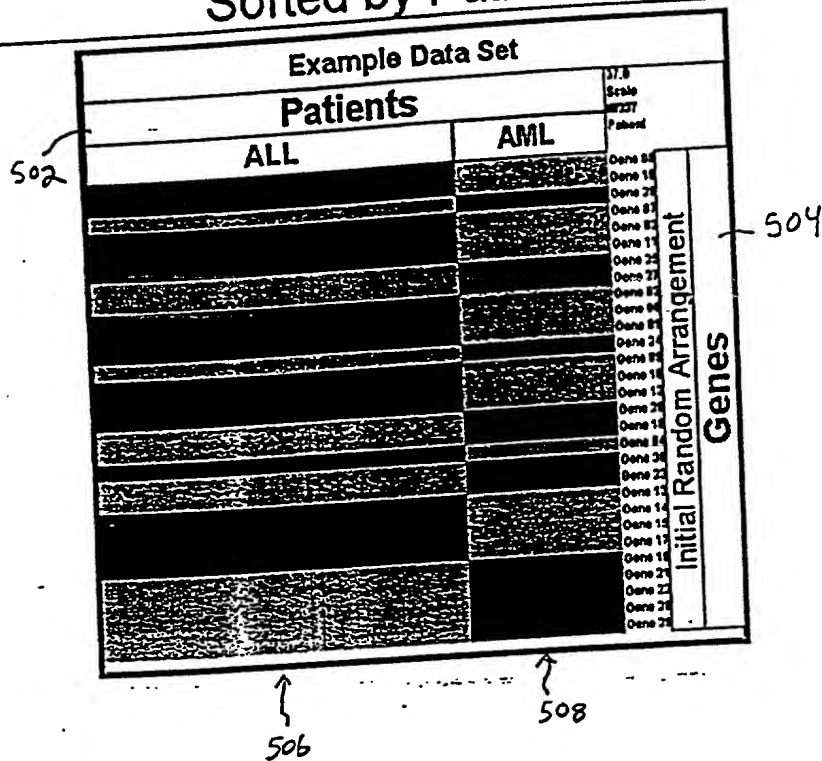


Figure 5B

2218917

204290" 2692400T

# Ideal Case Grouped on Genes

500

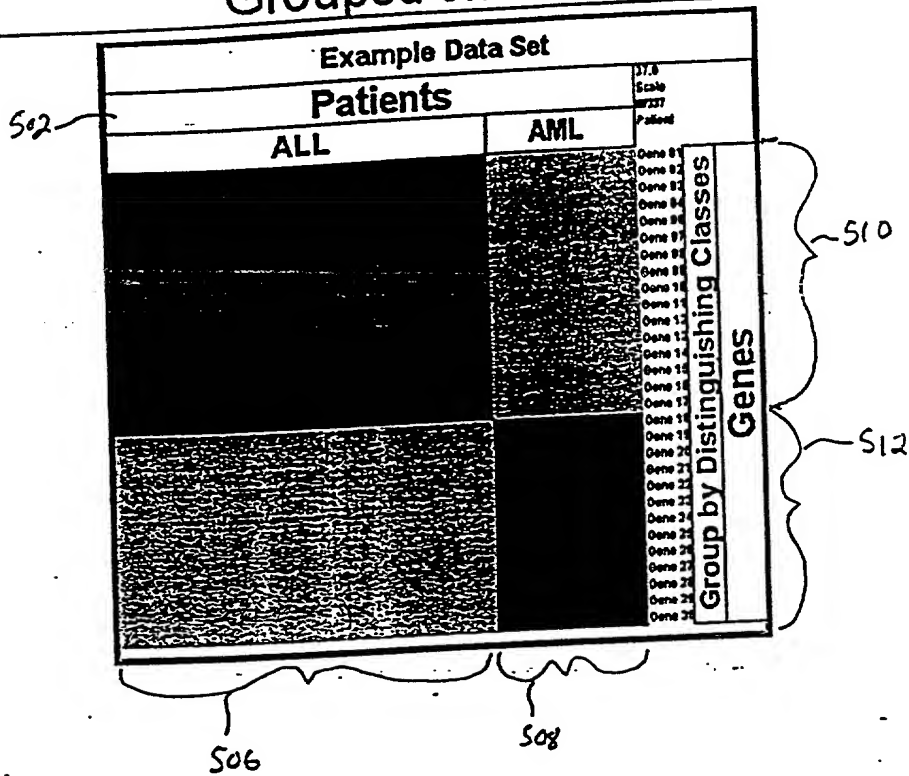
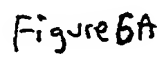


Figure 5c

22189V7

600



12/17,

# Sort 1st Dimension

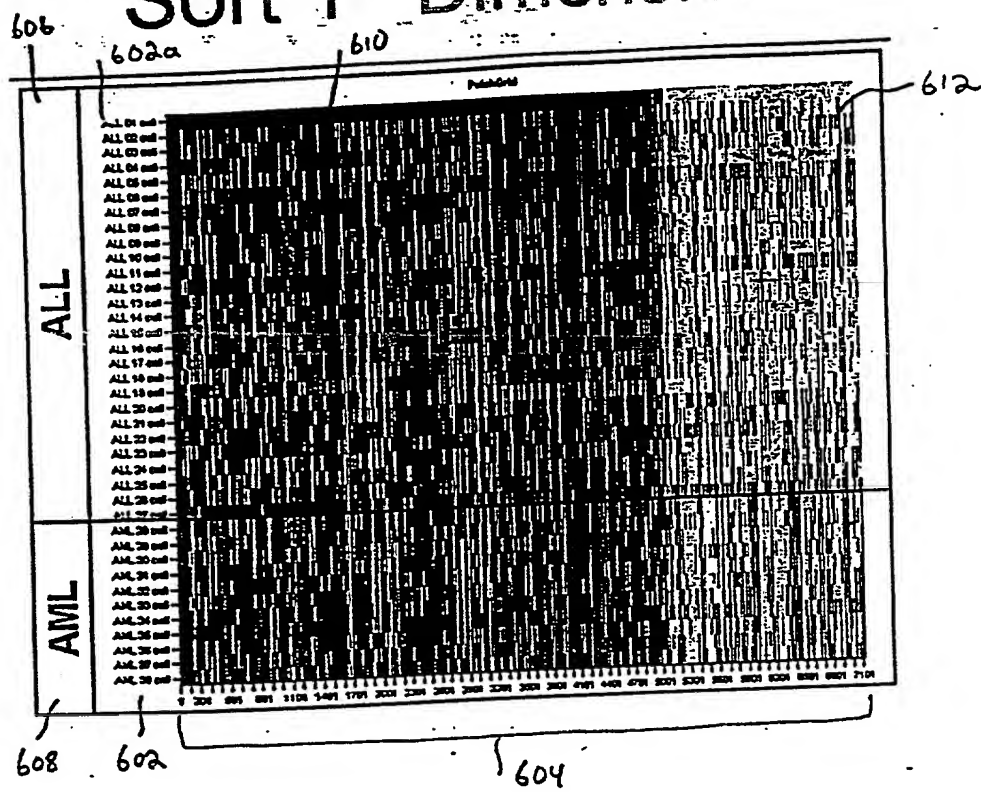


Figure 6B

2218917



204290-269400F

600

# Sort 2<sup>nd</sup> Dimension

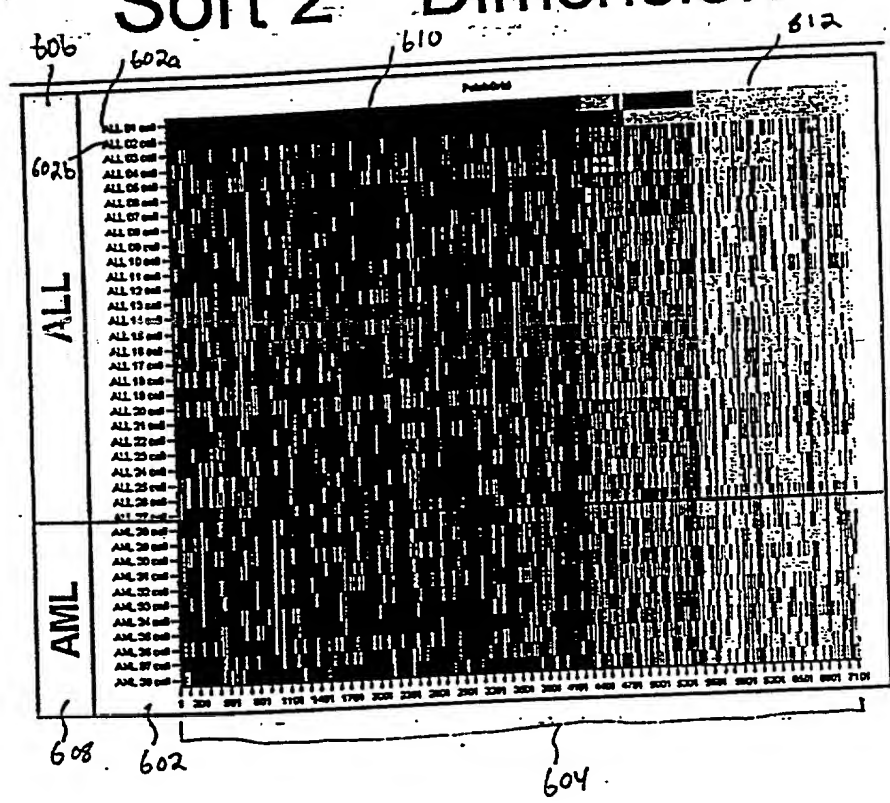


Figure 8C

2218917

6c  
5

12/17/

# Sorted 5 Dimensions

600

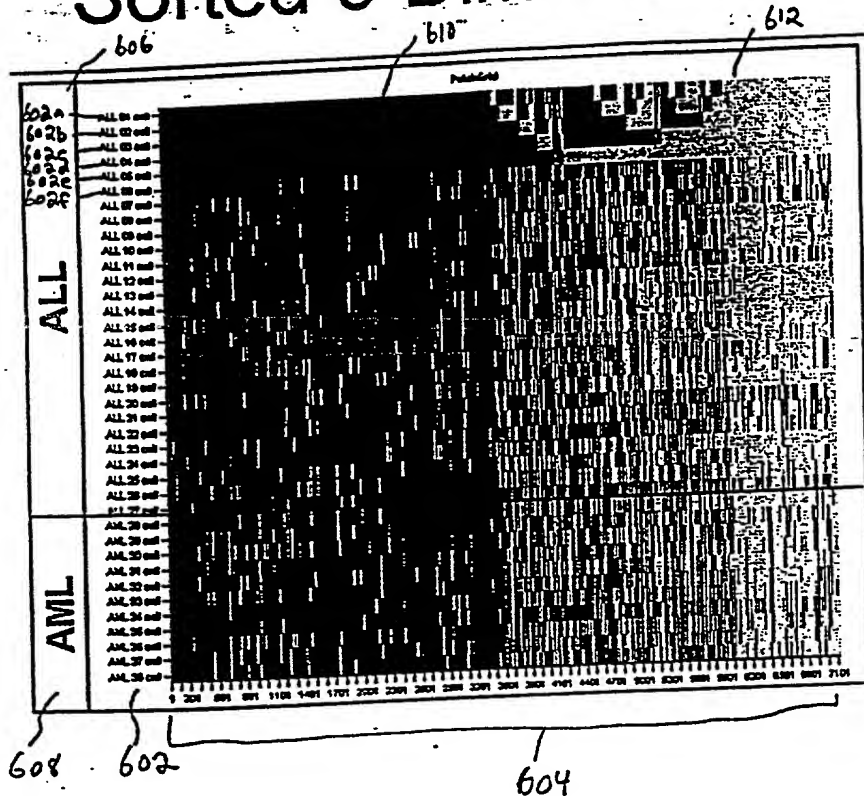


Figure 6D

2218917

(D)

5

12/17

# Sorted 33 Dimensions

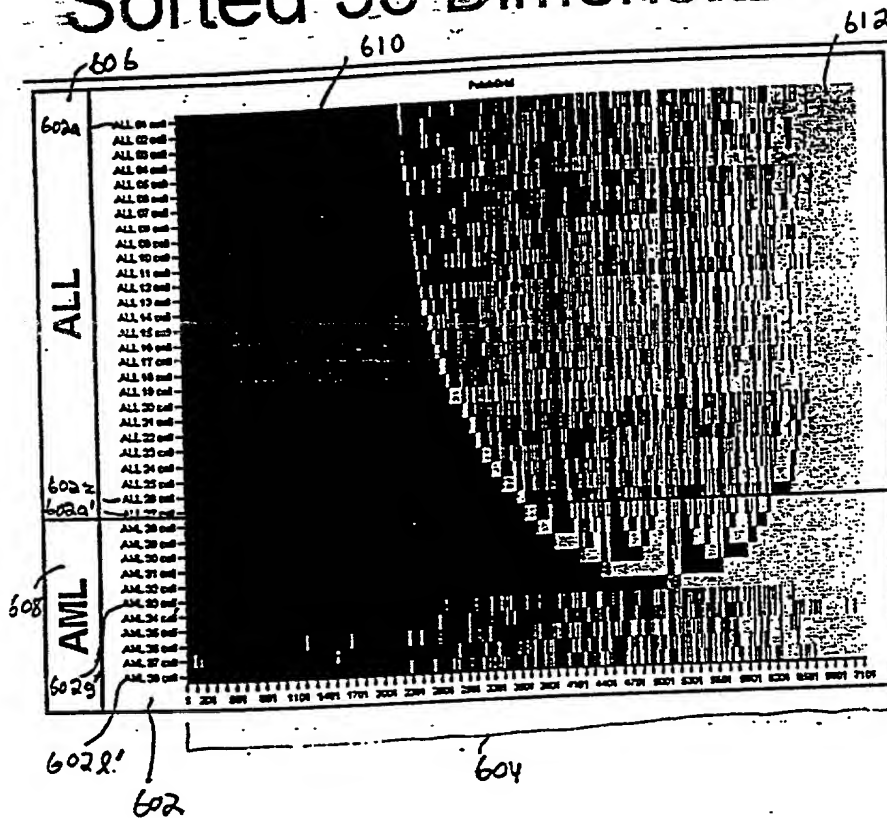


Figure 6E

2218917

# All Dimensions Sorted <sup>600</sup>

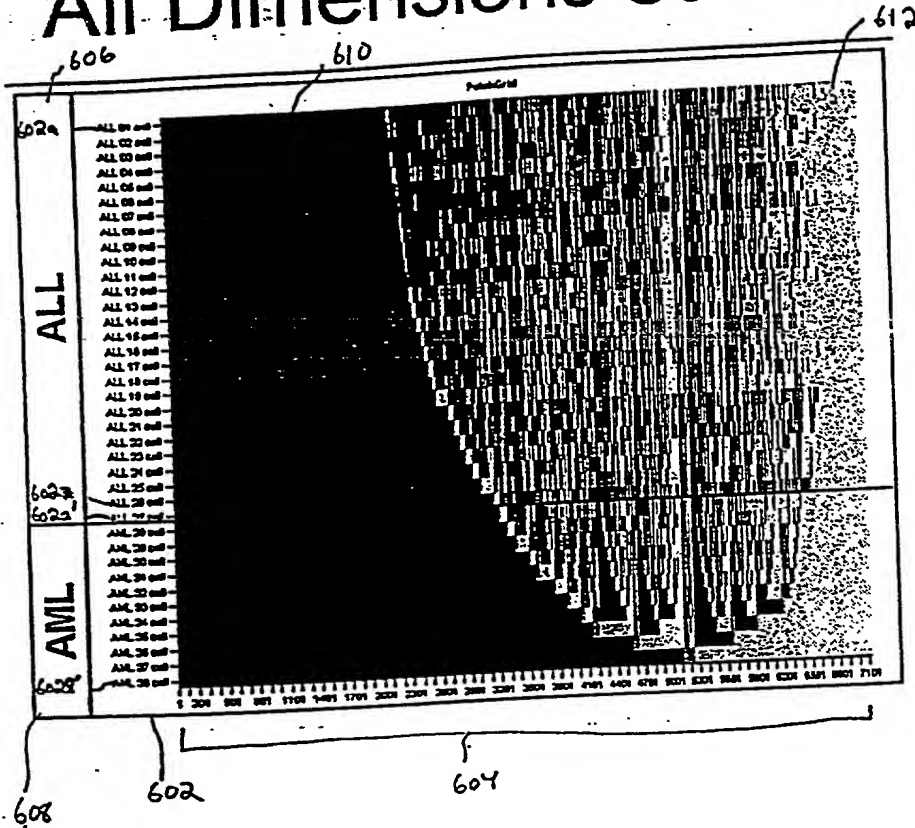


Figure 6F

2218717

6F

12/17/11

file://D:\TEMP\Figure 18f - All Sorted PatchGrid.gif

204290" 26922001

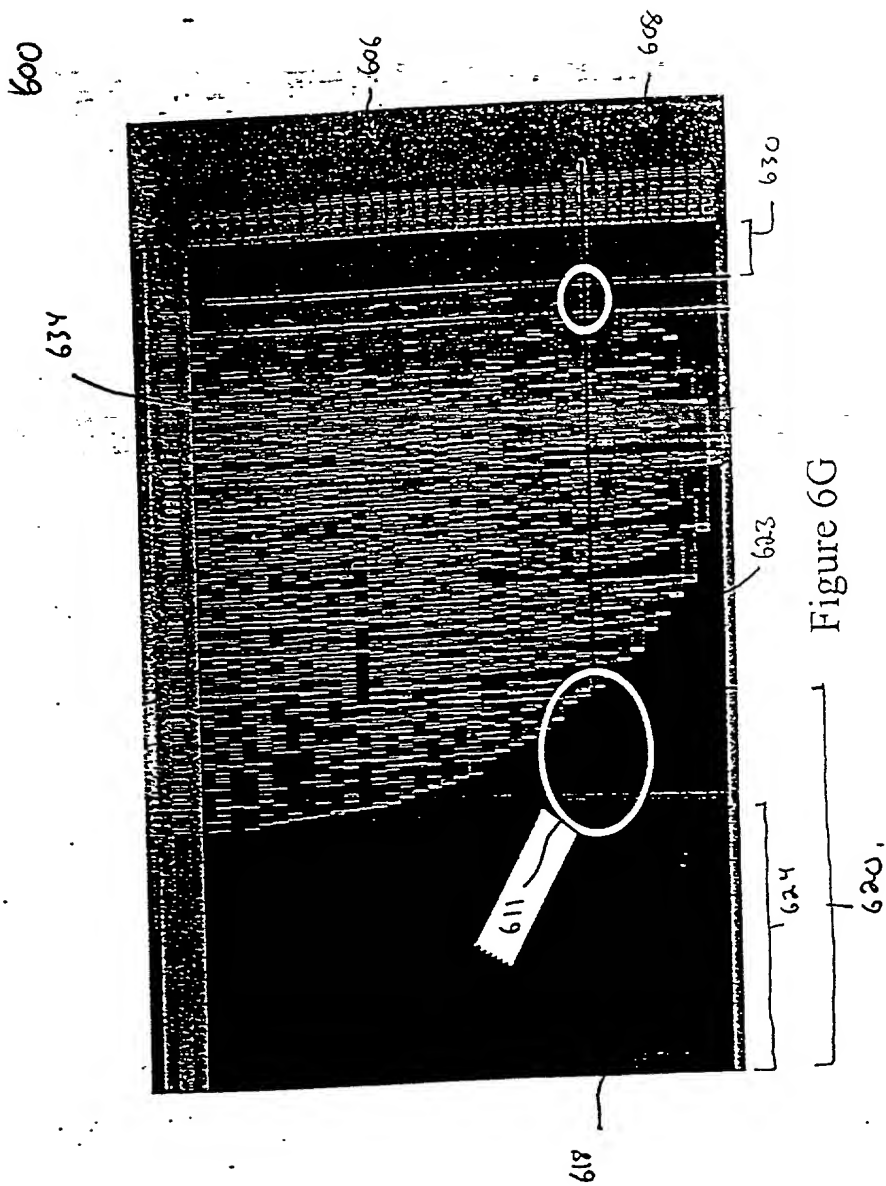
[illegible]

Figure 6G

204290 269700T

634  
459

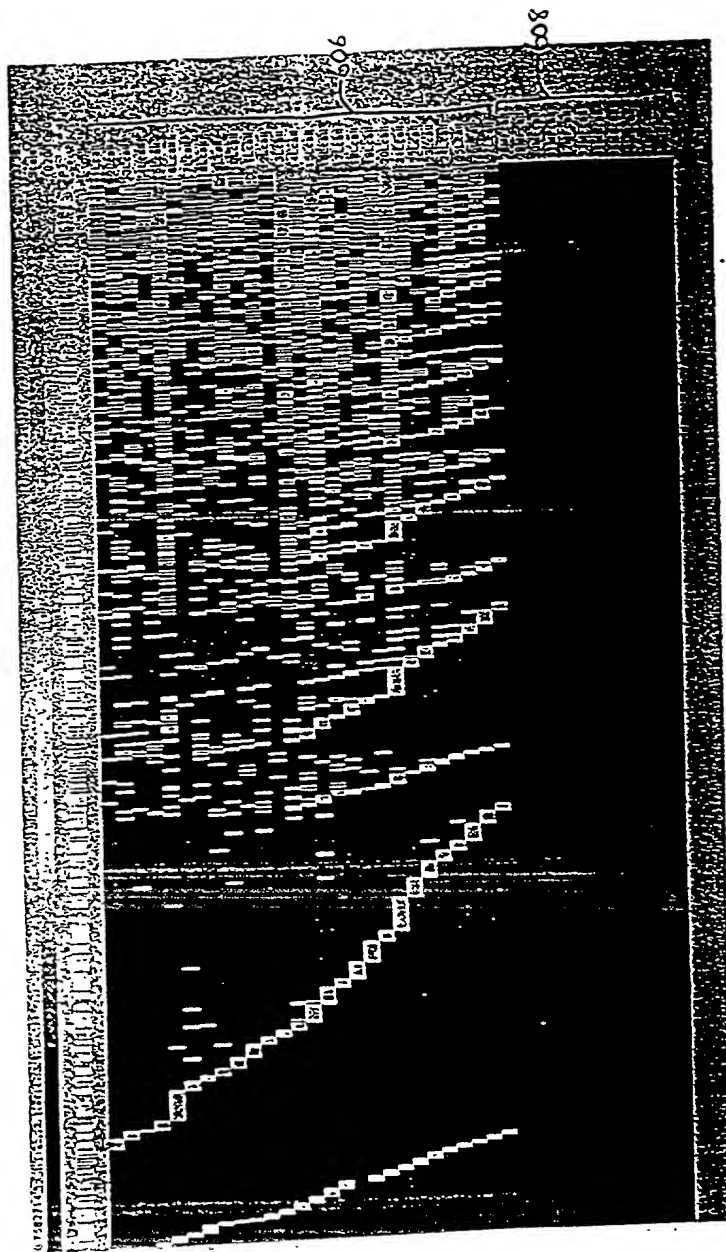


Figure 6H

1883502

# Principal Uncorrelated Record Selection

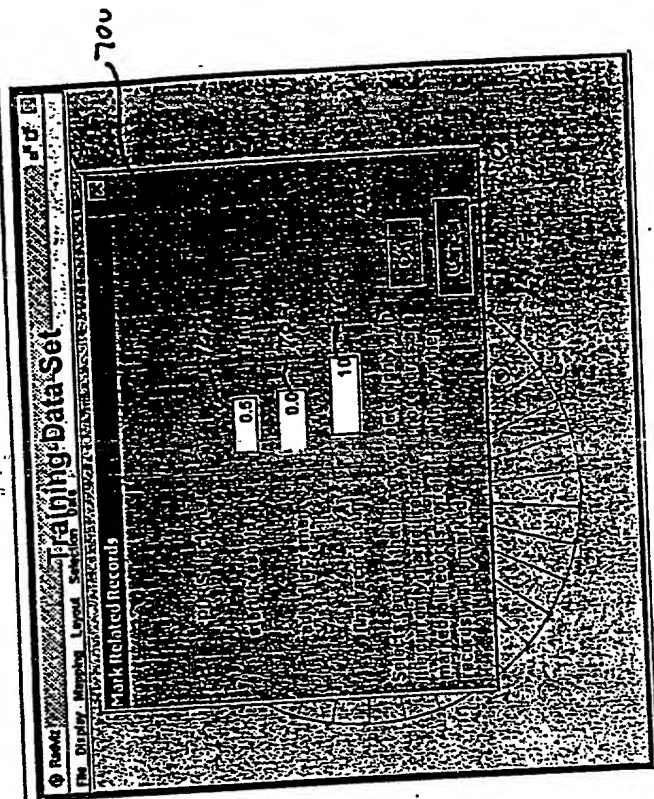


Figure 7

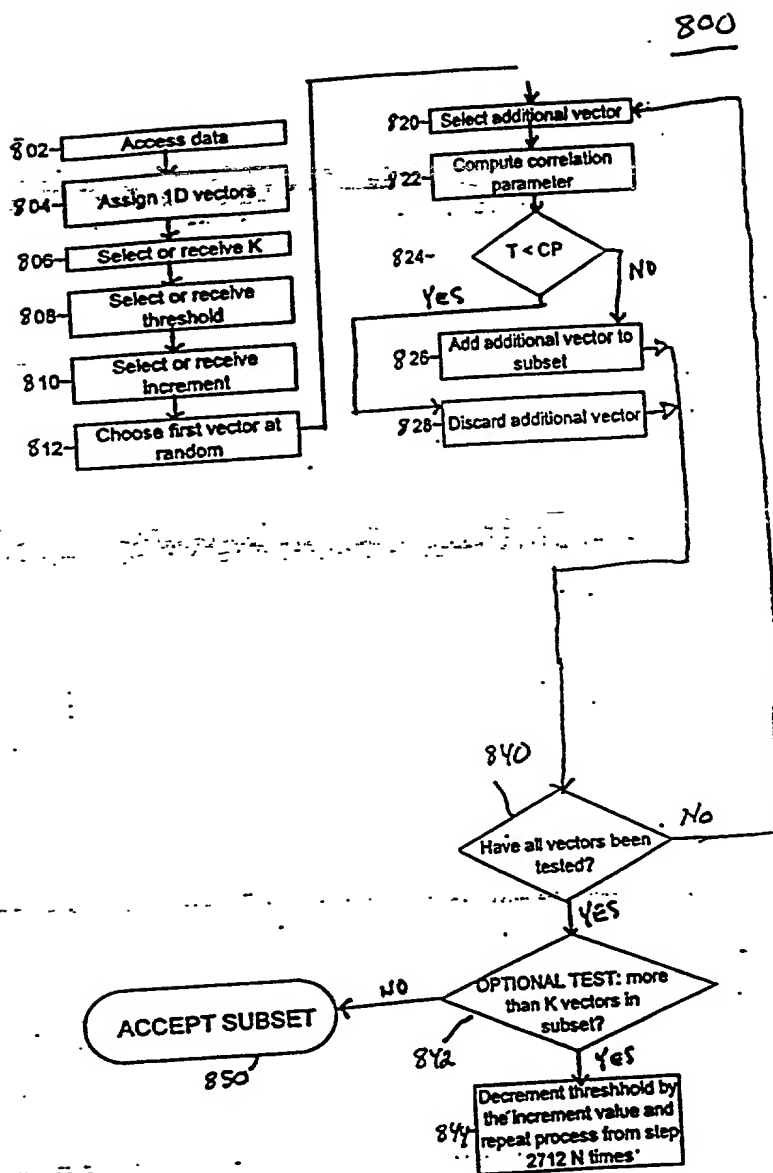


Figure 8.

2268-791



# 76 Principal Uncorrelated Genes

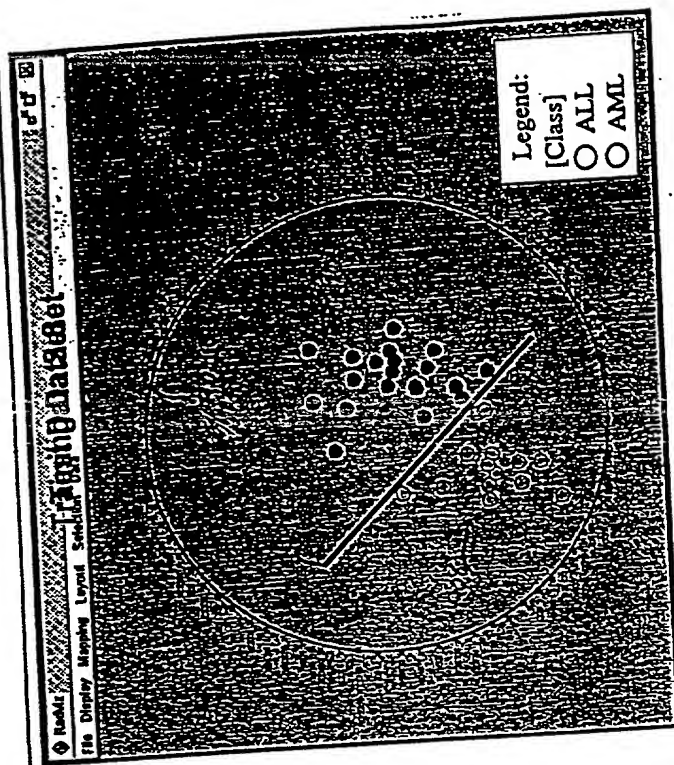
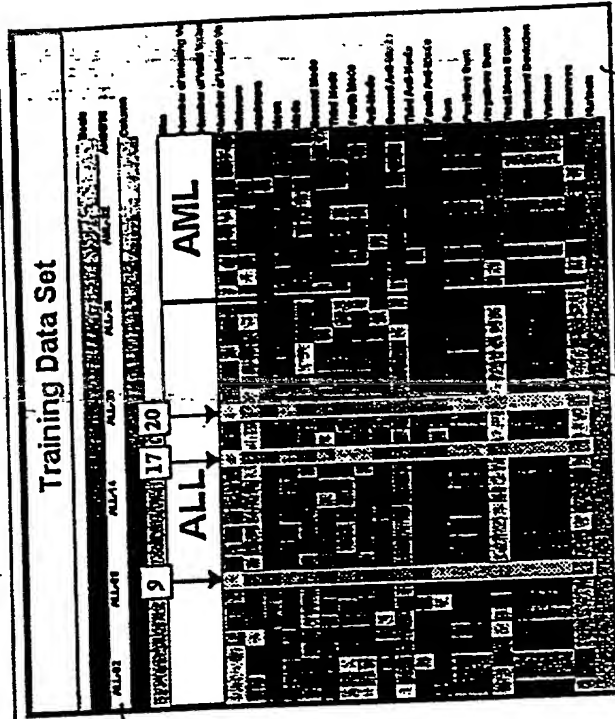


Figure 9

# Statistical Metadata (Affymetrix Absolute Data)

1000



602

1008



LOW HIGH

1002

1004

Figure 10A



204250-259200F

# Pearson Correlation Coefficients (Affymetrix Comparative Data)

1003  
2

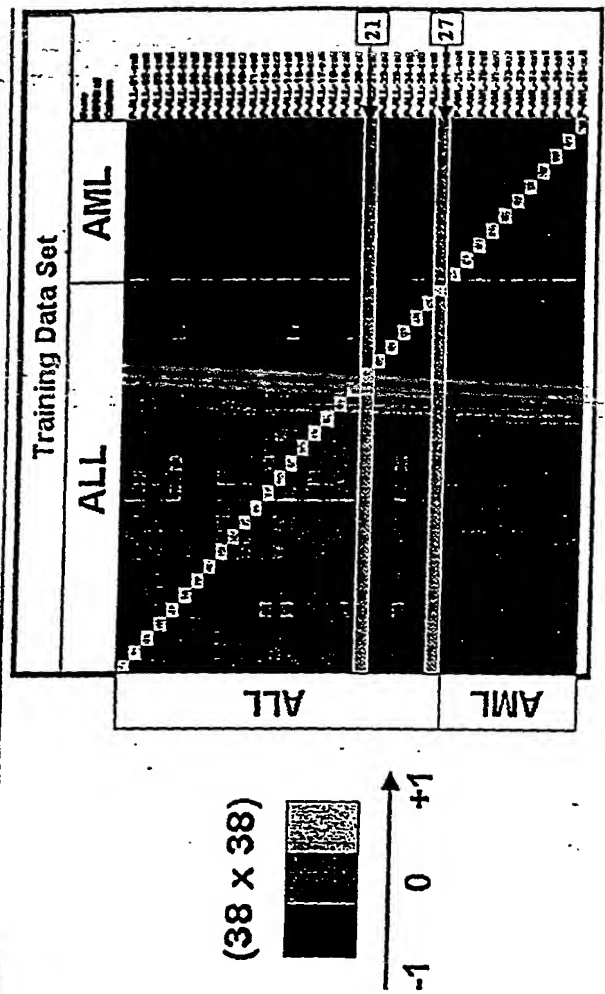


Figure 10C

2218917



# Sort " - Variable 1

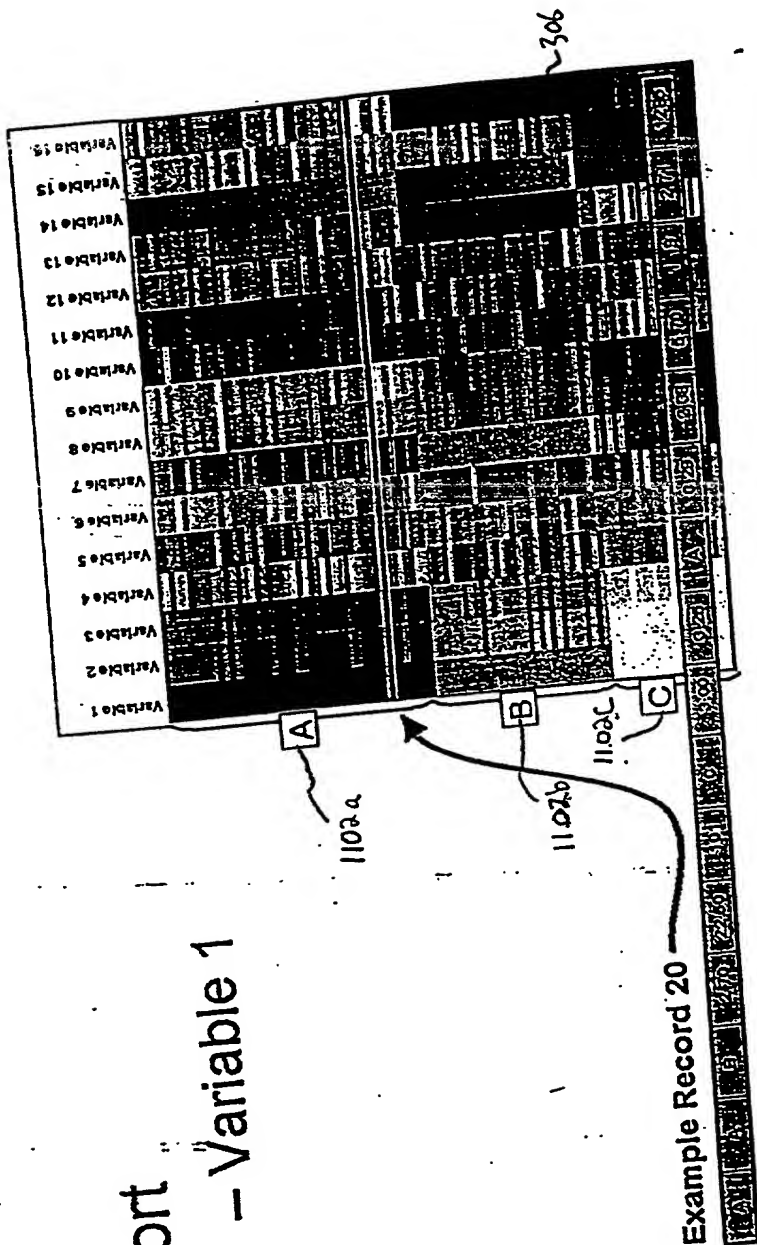
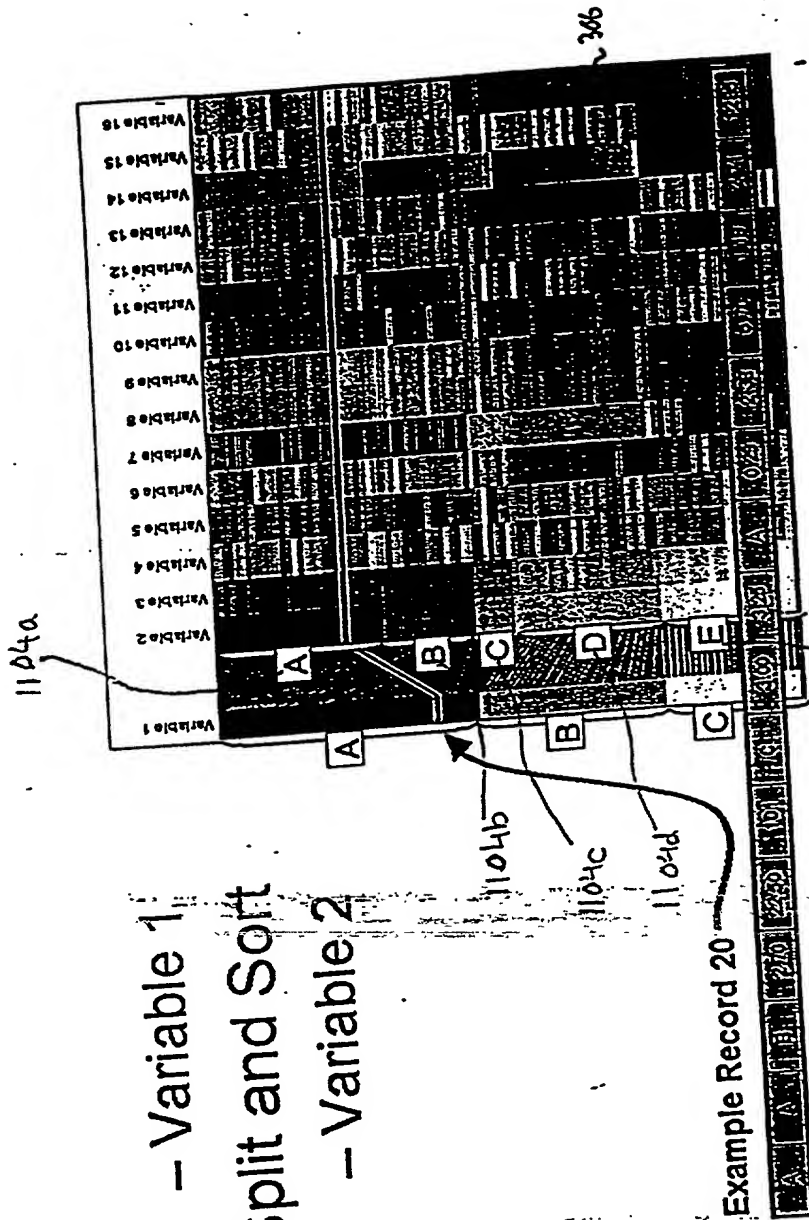


Figure 11B

2218917

- Variable 1  
Split and Sort  
- Variable 2



1104e Figure 11C

2218917

- Variable 1
- Variable 2
- Split and Sort
- Variable 3

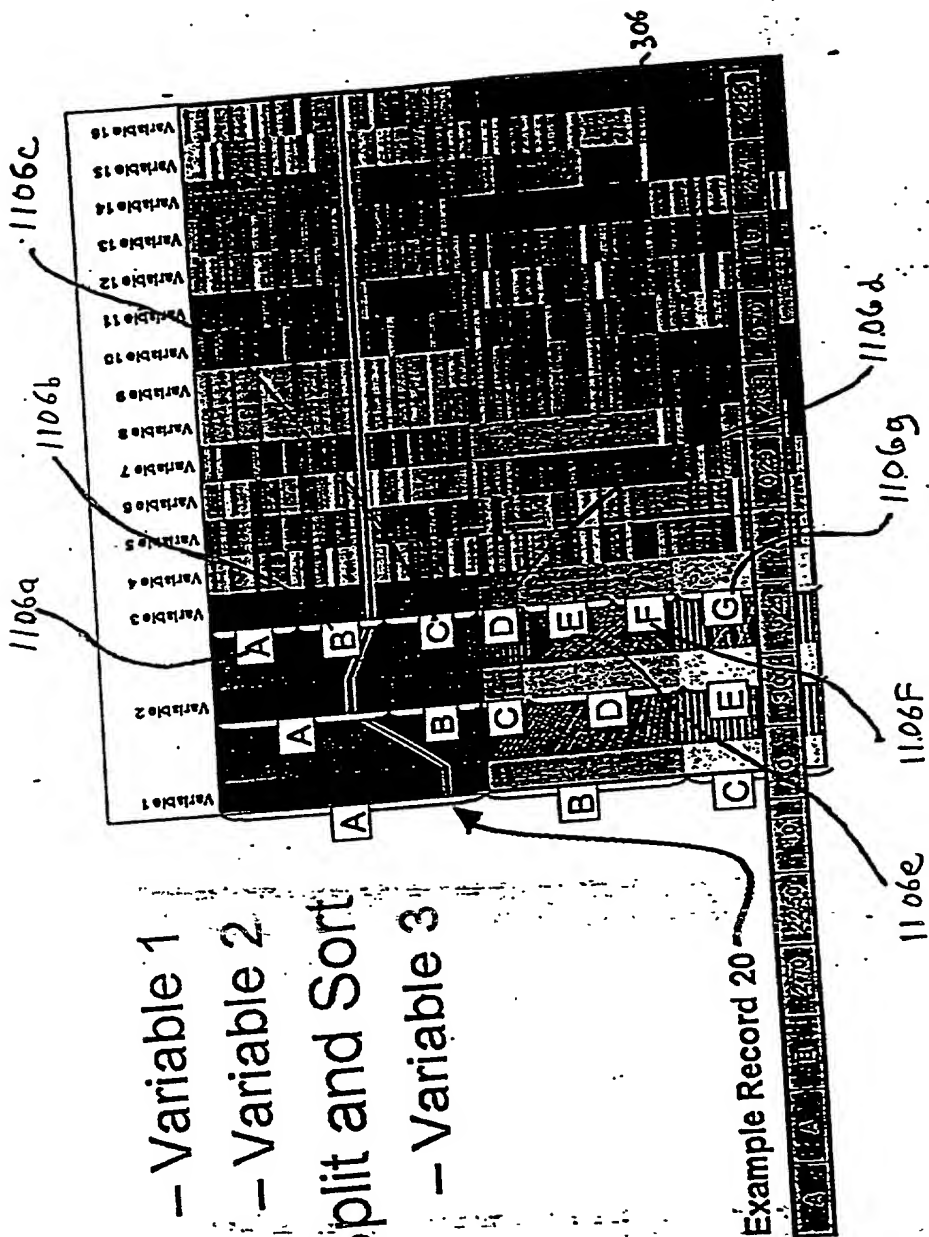


Figure 11D



Final Result

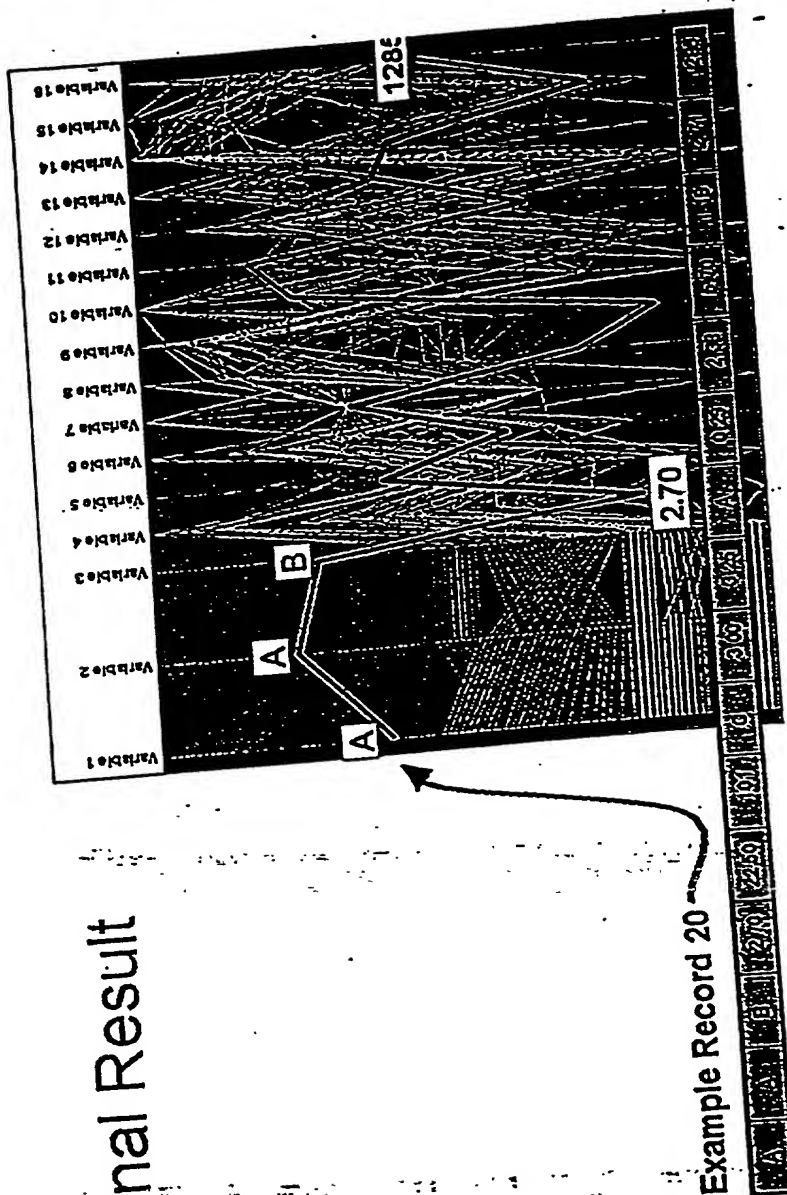


Figure 11E

Example record  
showing the  
underlying  
connections

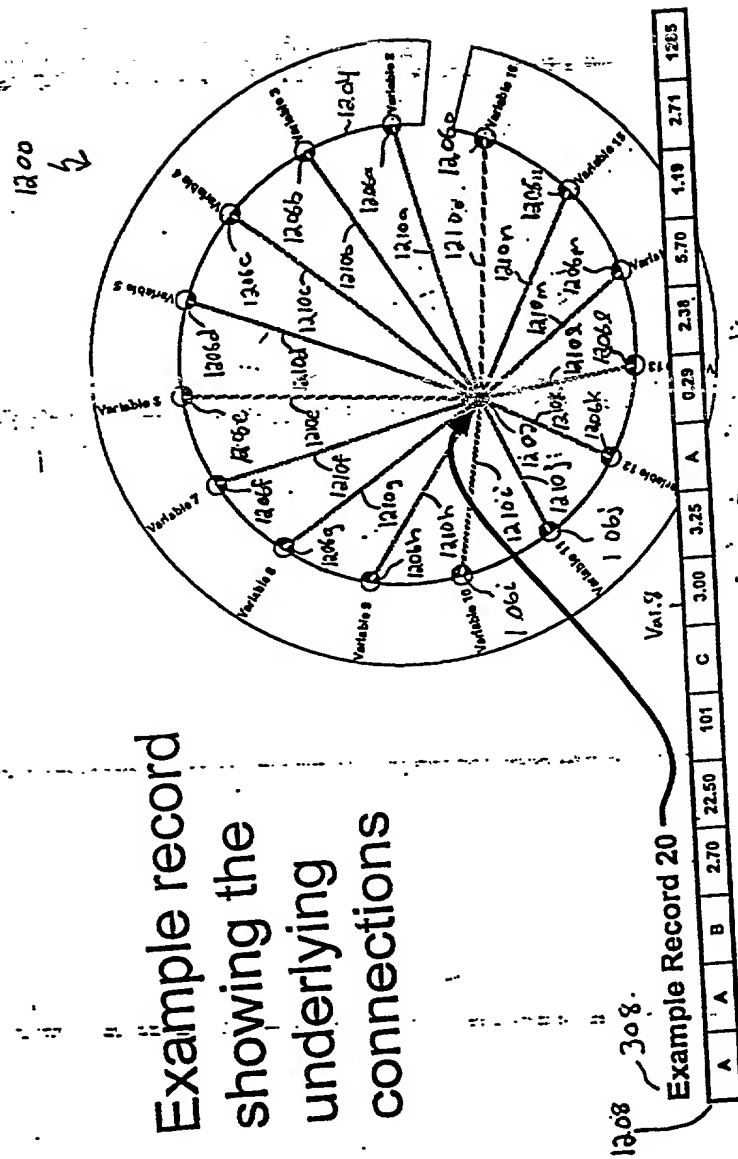


Figure 12A

1200  
2

- AML
- B-ALL
- T-ALL

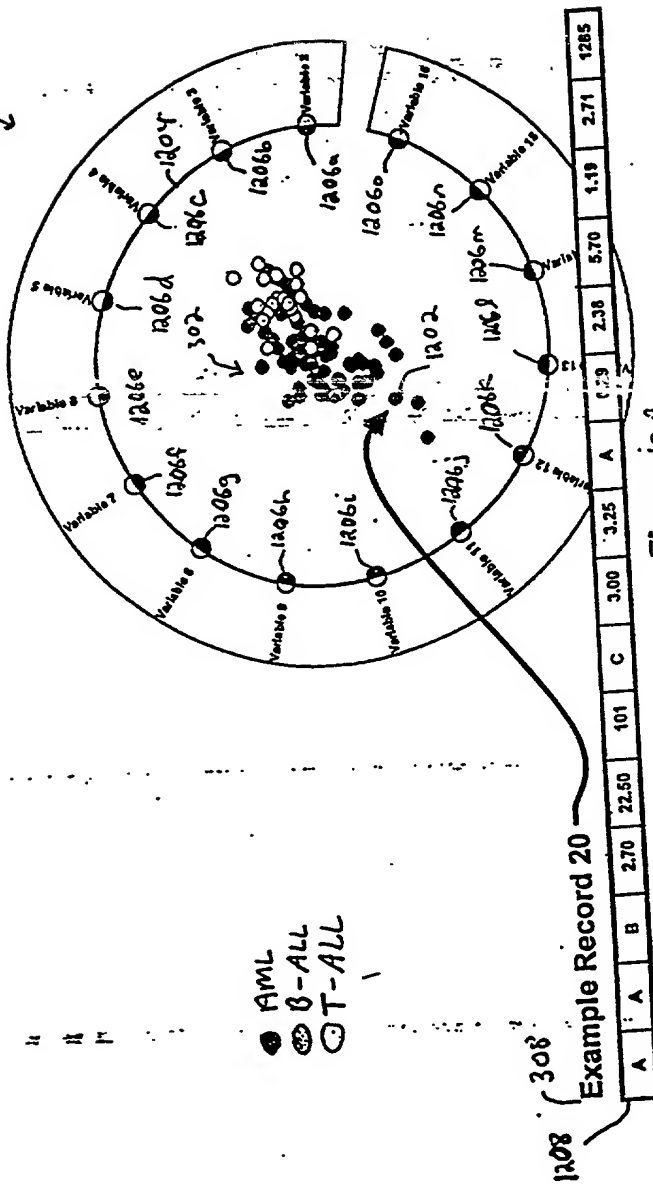


Figure 12B

2259888

# Visual Classifier

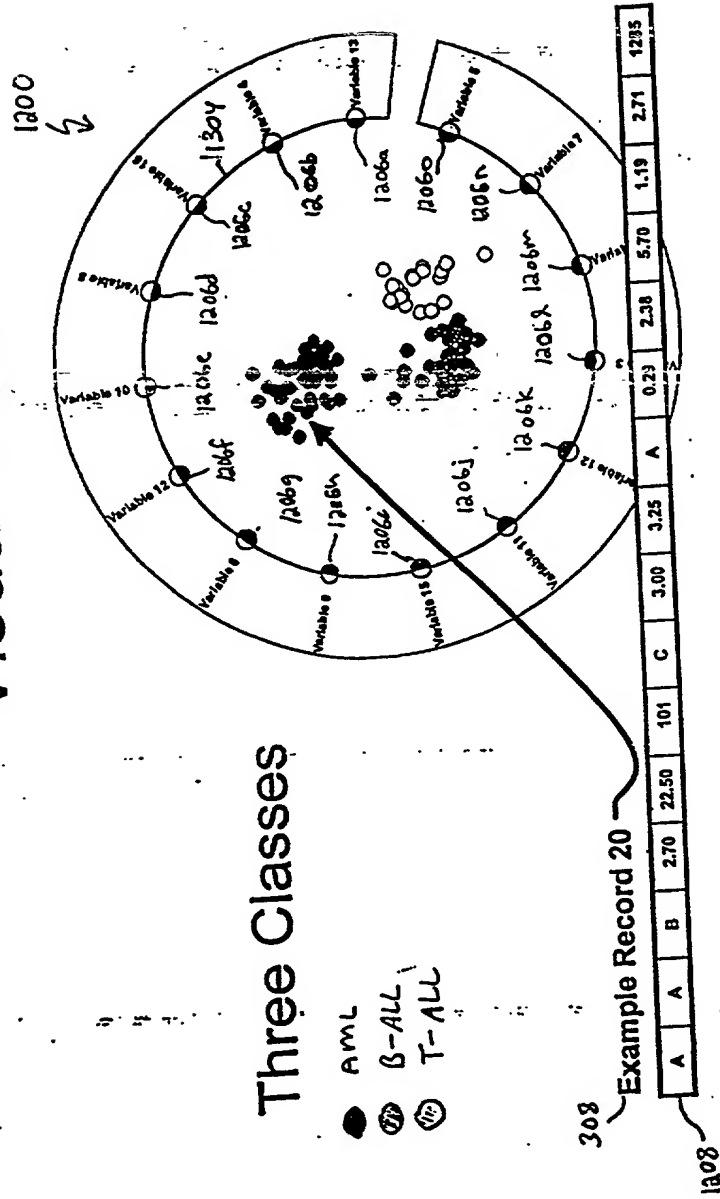


Figure 12C

204290" 269/001

1300

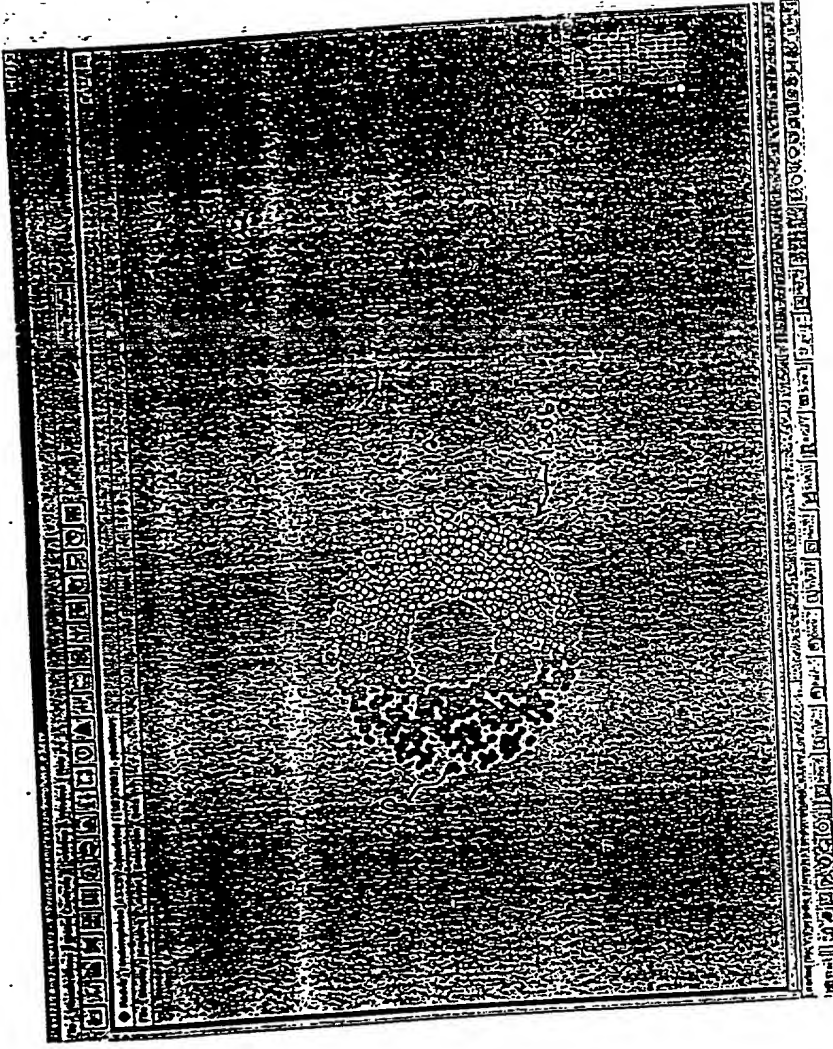


Figure 13A

226930

204290.062402

101

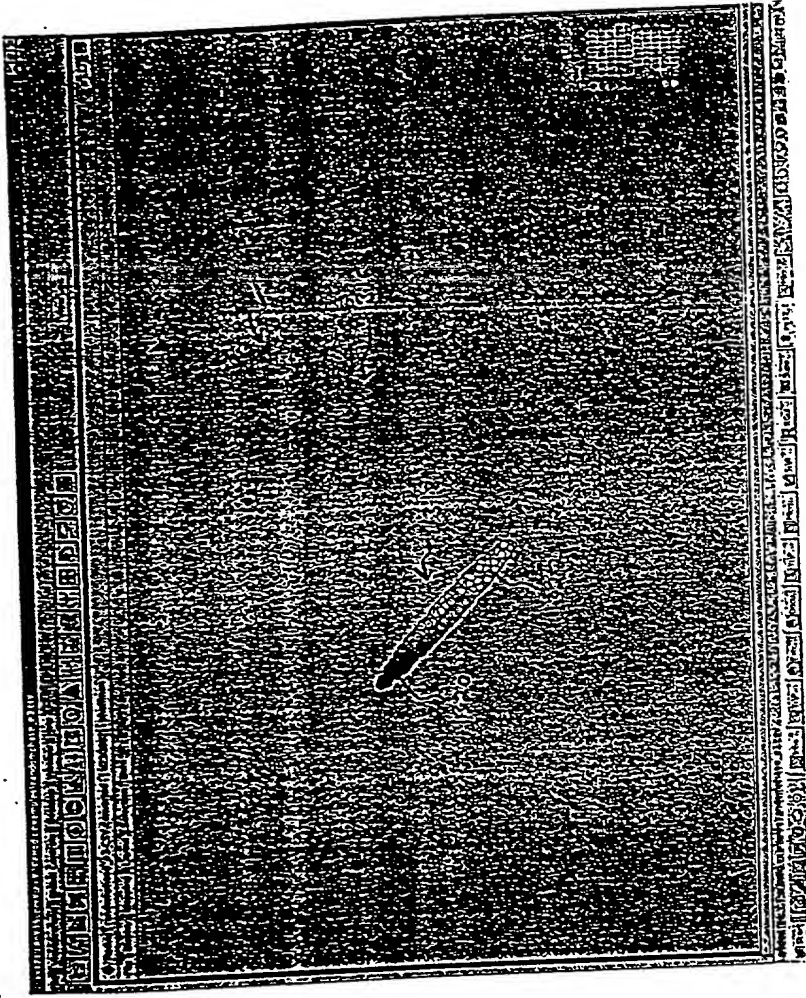
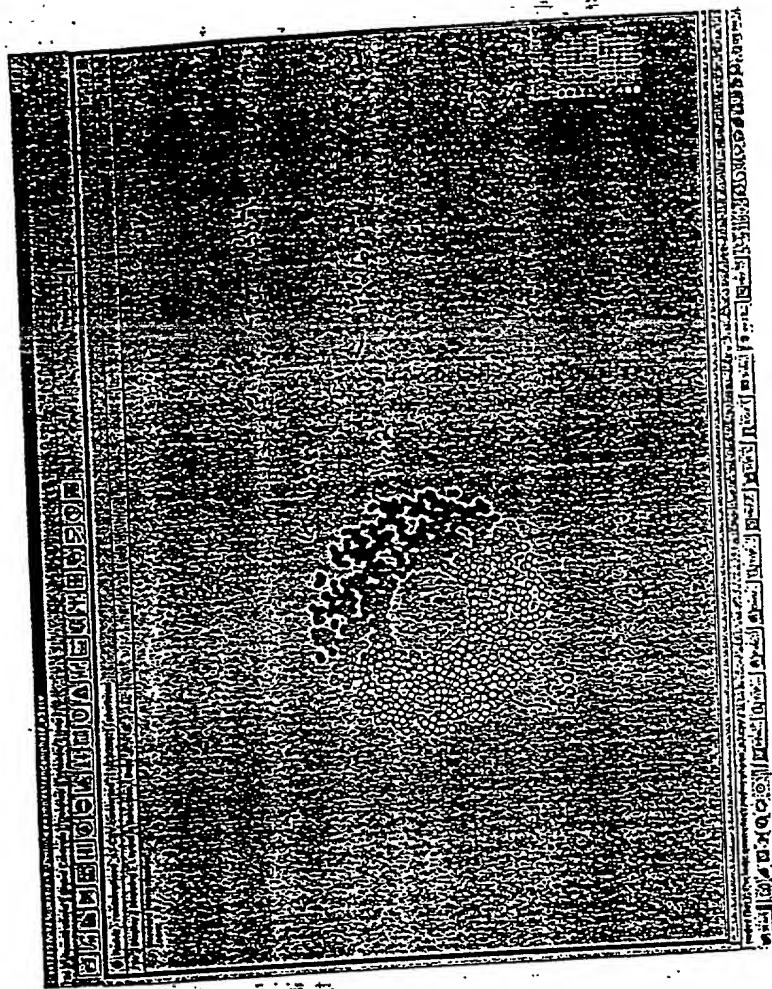


Figure 13 B

2261307

204290" 2597200T

1303



216937

Figure 13C

204280" 269700T

1305



Figure 13D

226937



204290" 269700T

1307

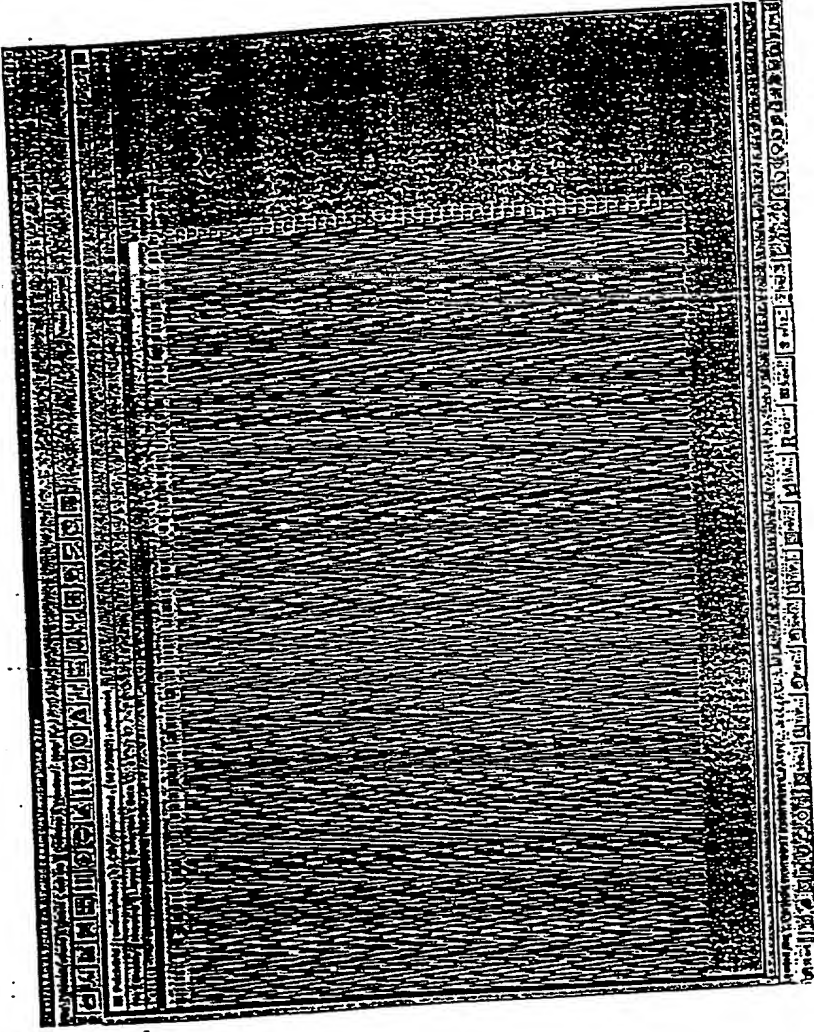
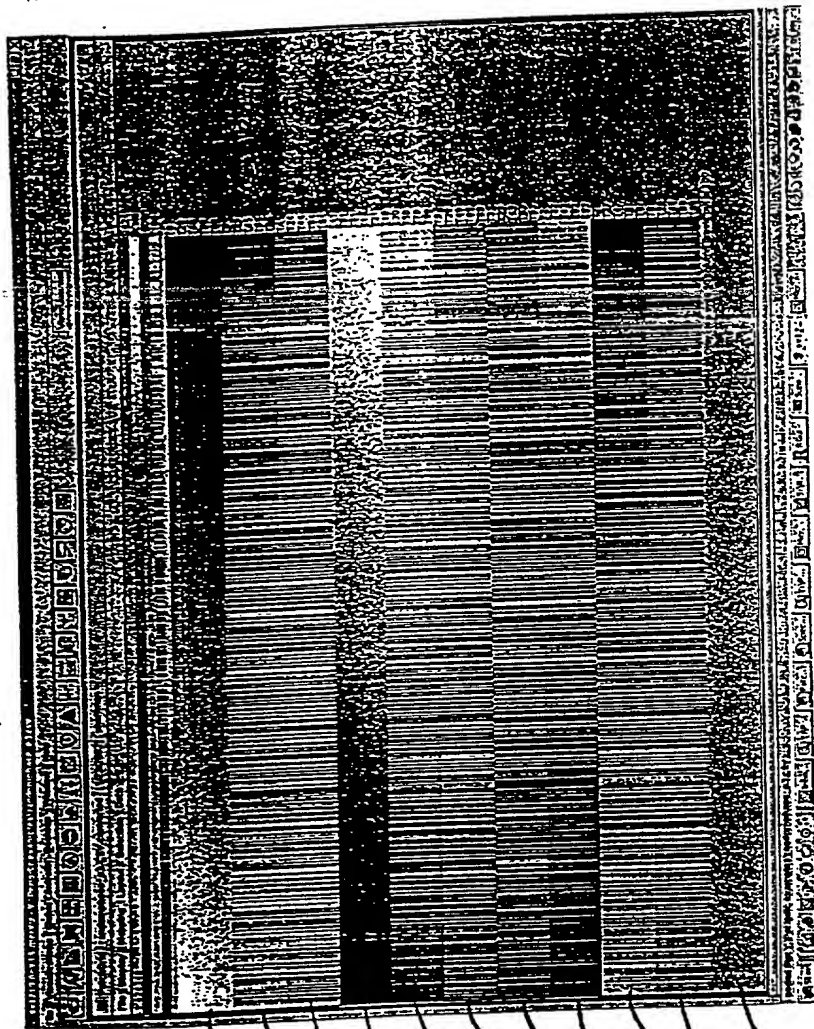


Figure 13 ~~EE~~

226937

204290" 269700T

1309



1346a

1346b

1346c

1346d

1346e

1346f

1346g

1346h

1346i

1346j

1346k

Figure 13F

204290

204290" 269/00T

1311

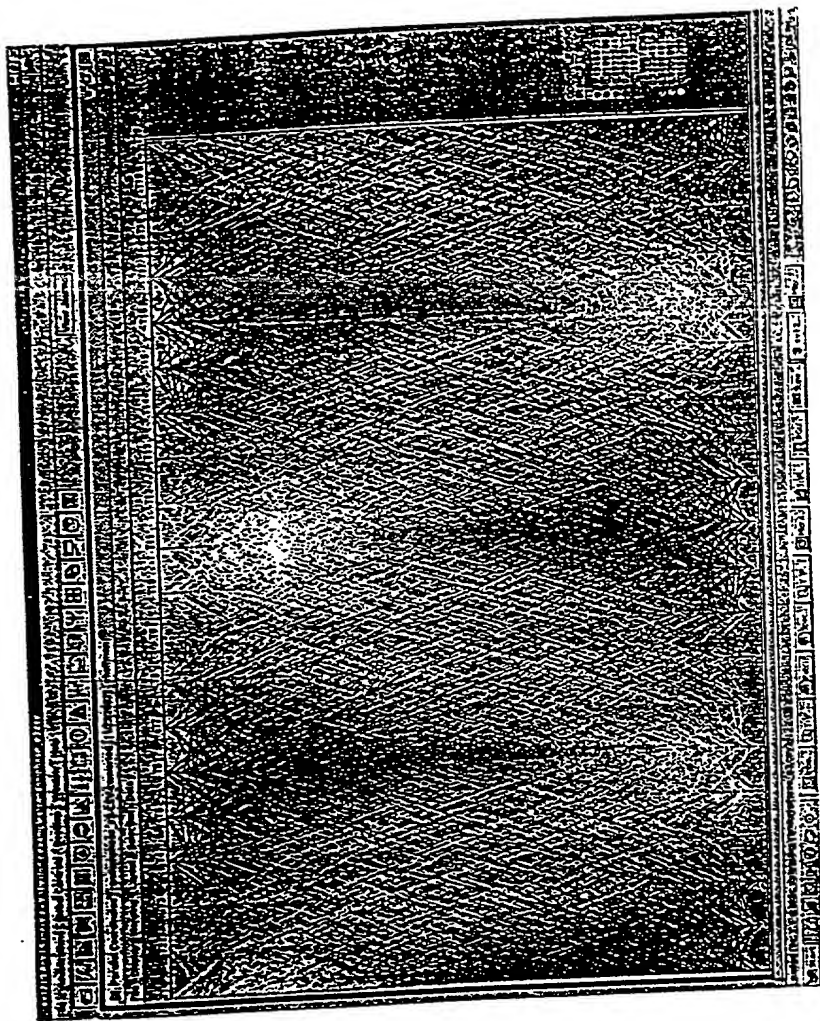


Figure 13G

226937

Transforming a  
rectangular to a  
radial layout

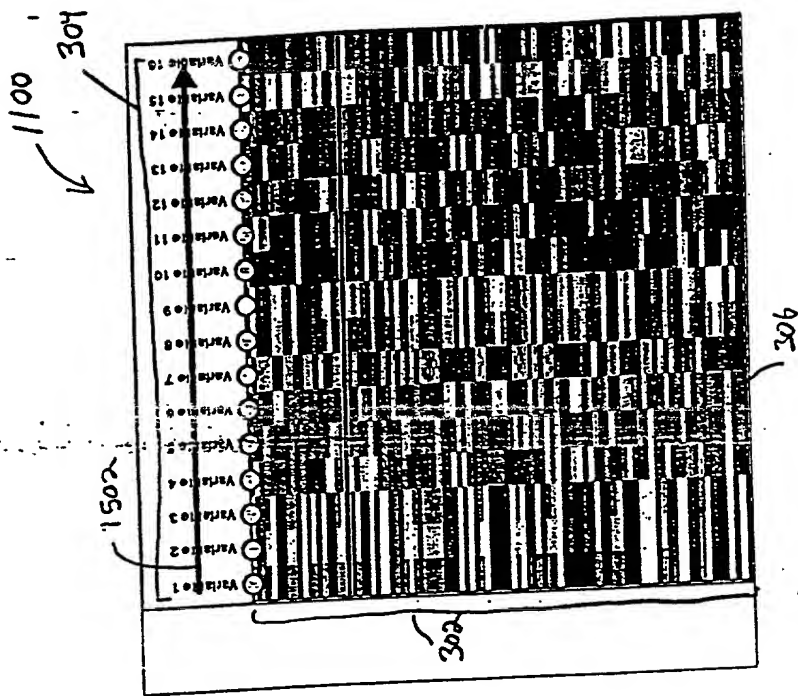


Figure 15A





# Shape Control - Before Moving Anchors

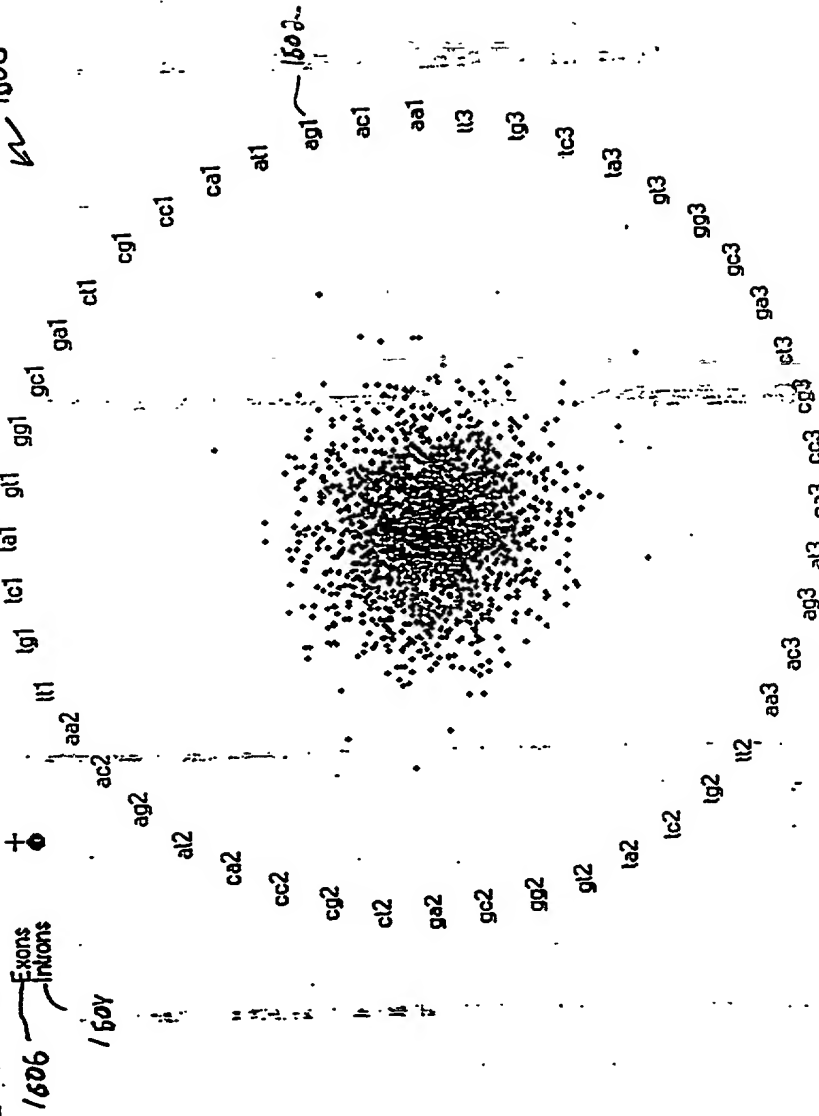


Figure 16A





# Shape Control - Arbitrary Spline

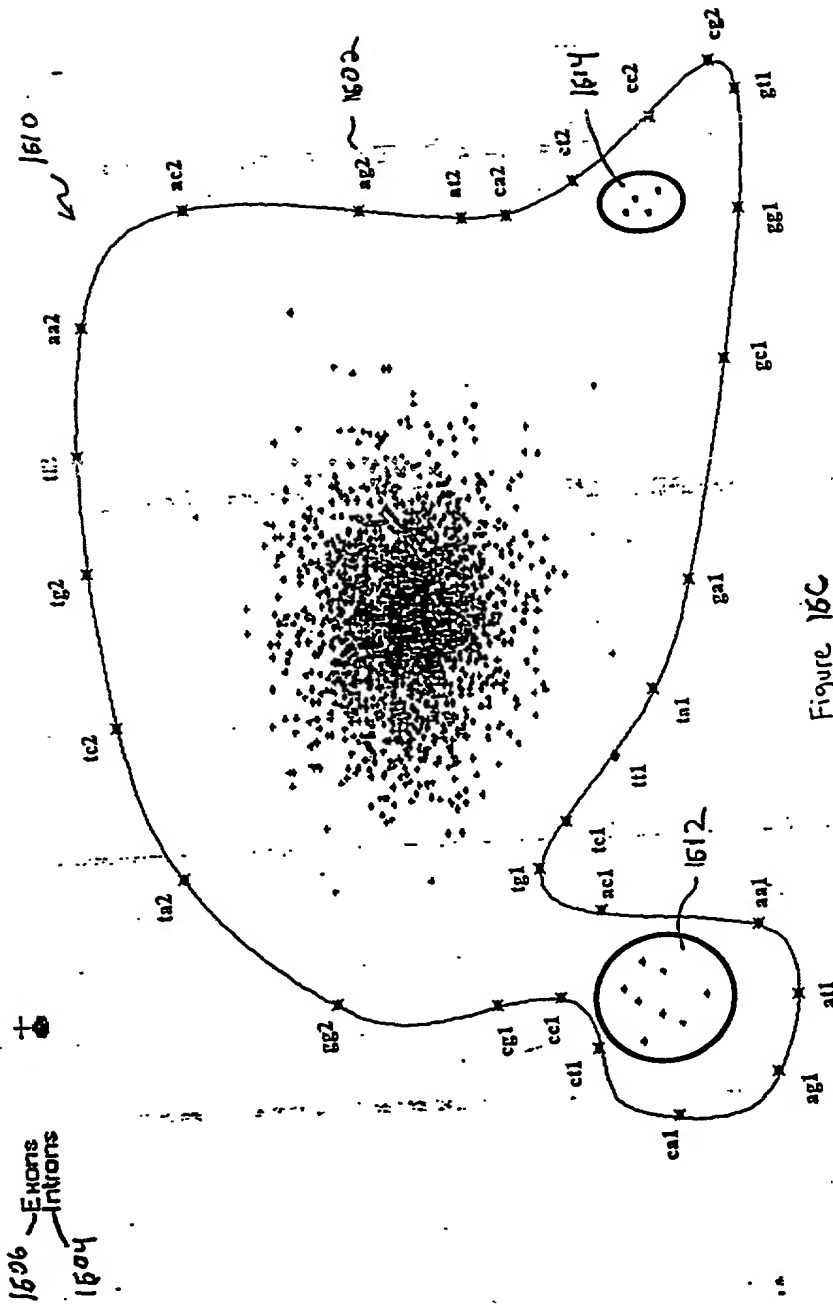


Figure 16C

12-1620

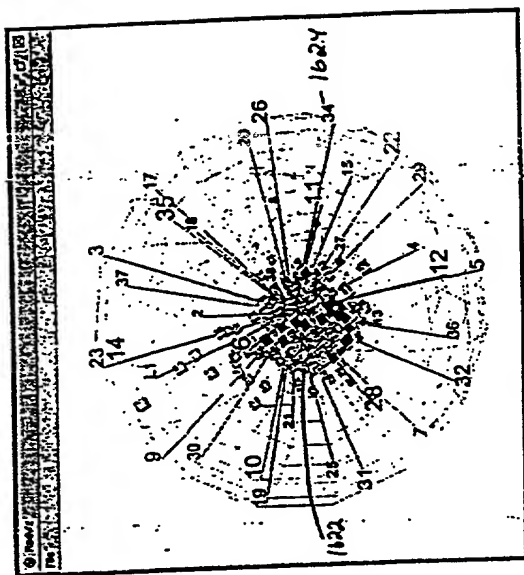


Fig. 16D

Figure 1 consists of 12 histograms, labeled (a) through (l), arranged vertically. Each histogram shows the frequency of the number of non-zero elements in the vector  $x$  for a specific value of  $n$ . The x-axis for all histograms is 'Number of non-zero elements' with major ticks at 0, 20, 40, 60, 80, 100, and 120. The y-axis is 'Frequency' with major ticks at 0, 2, 4, 6, 8, and 10. The histograms are for  $n = 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110, 120$  respectively. As  $n$  increases, the distribution of non-zero elements becomes more concentrated around  $n$ , and the peak frequency increases.

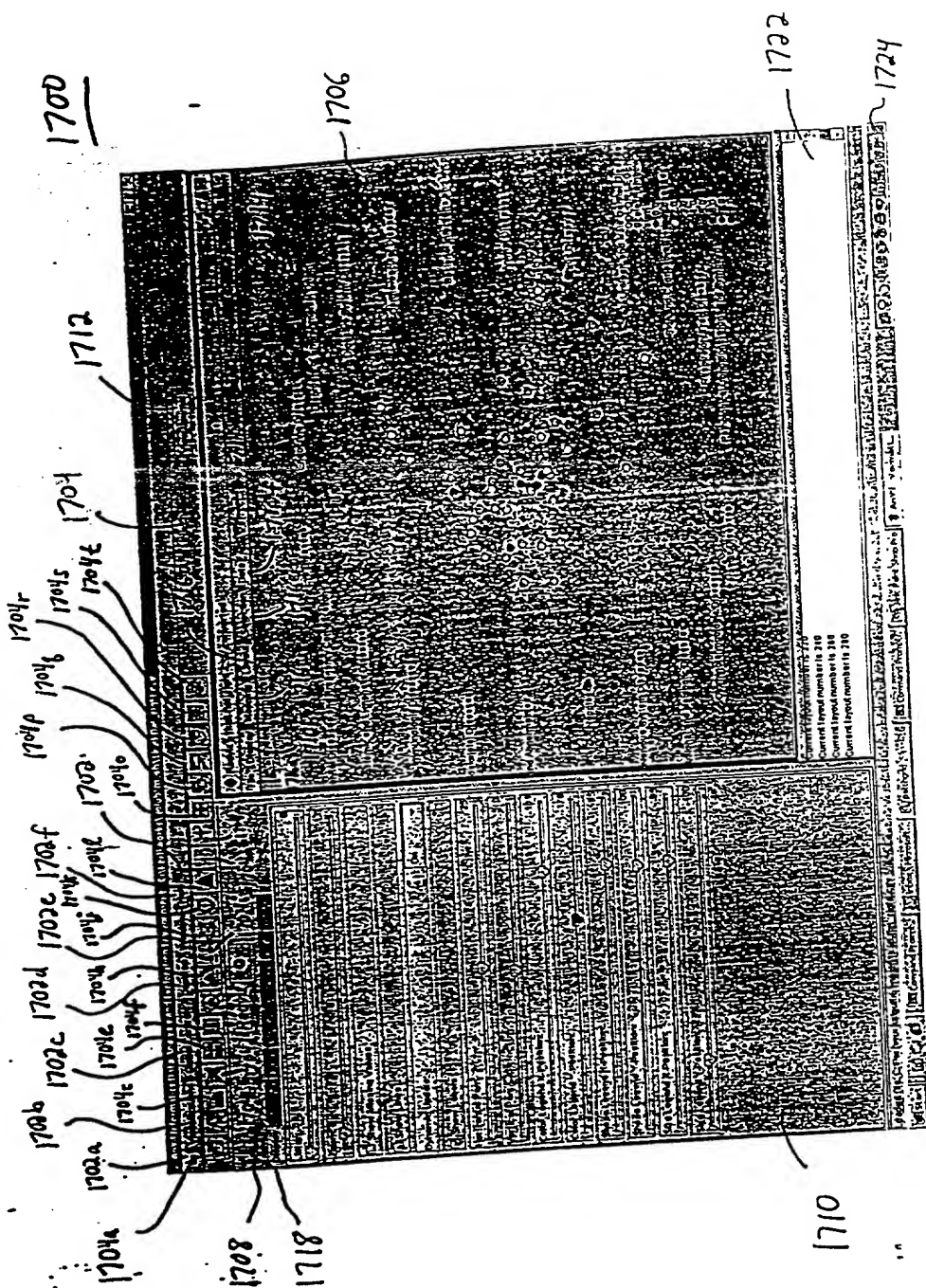


Figure 17

99CH21C

204290" 2692200"

1801 1804 1806 1808 1801

1700

1708

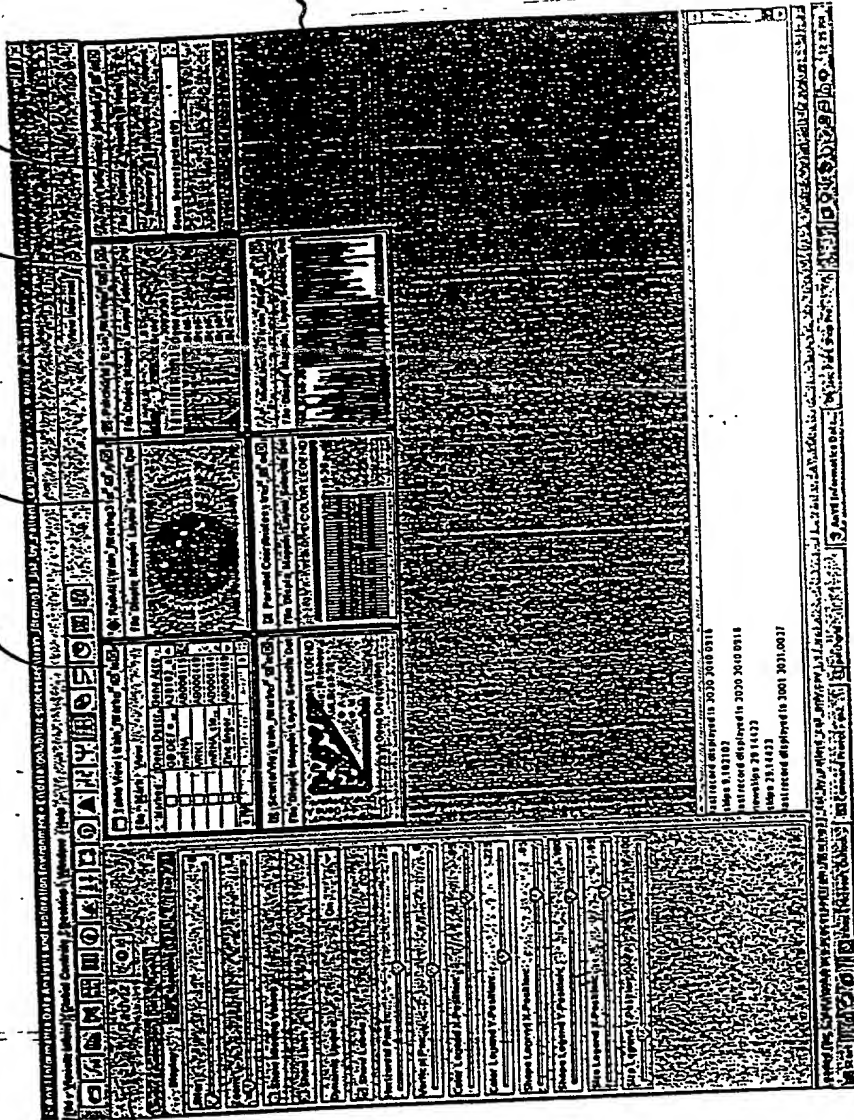


Figure 18

7718917

204290" 269420T

1900

1706

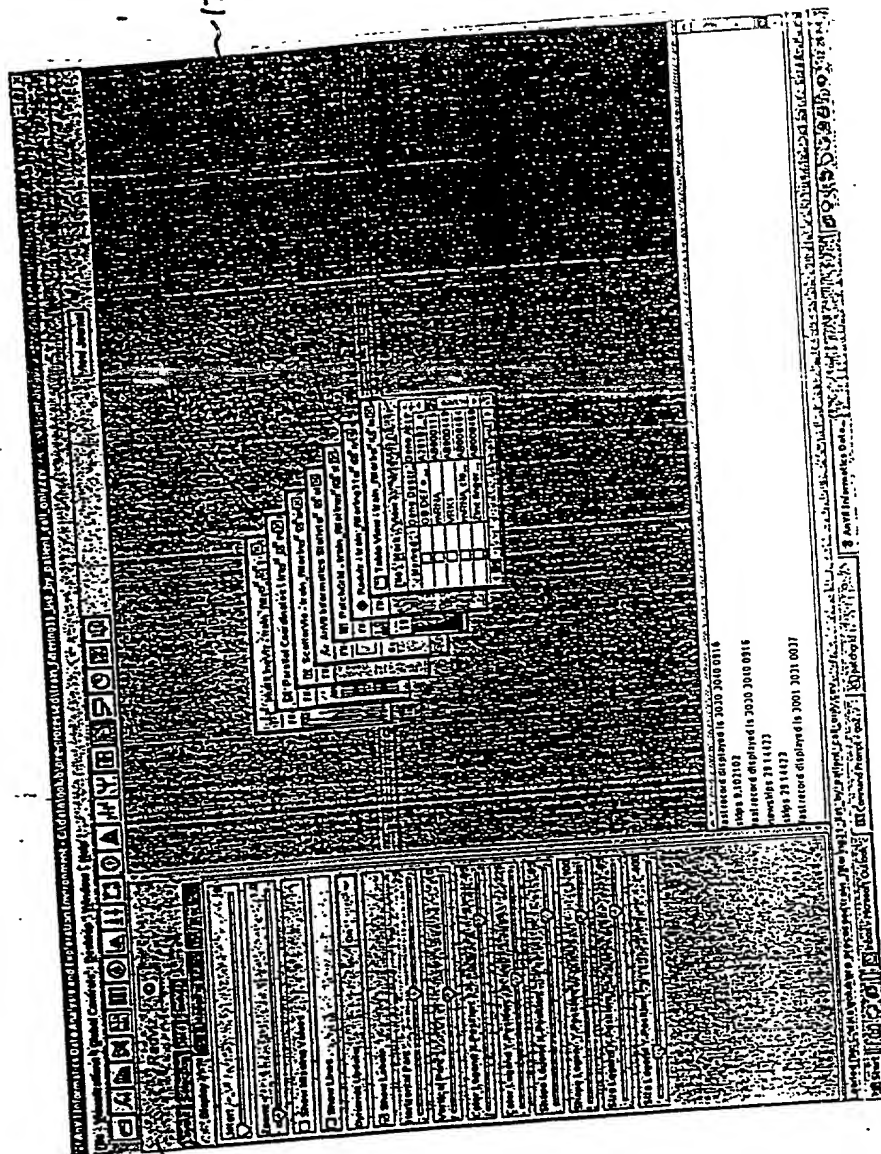


Figure 19

F16.20

204290 269200T

2102

1706

1710g

1710a

1708

1718

2106

2104

2108

1720

2102

2110

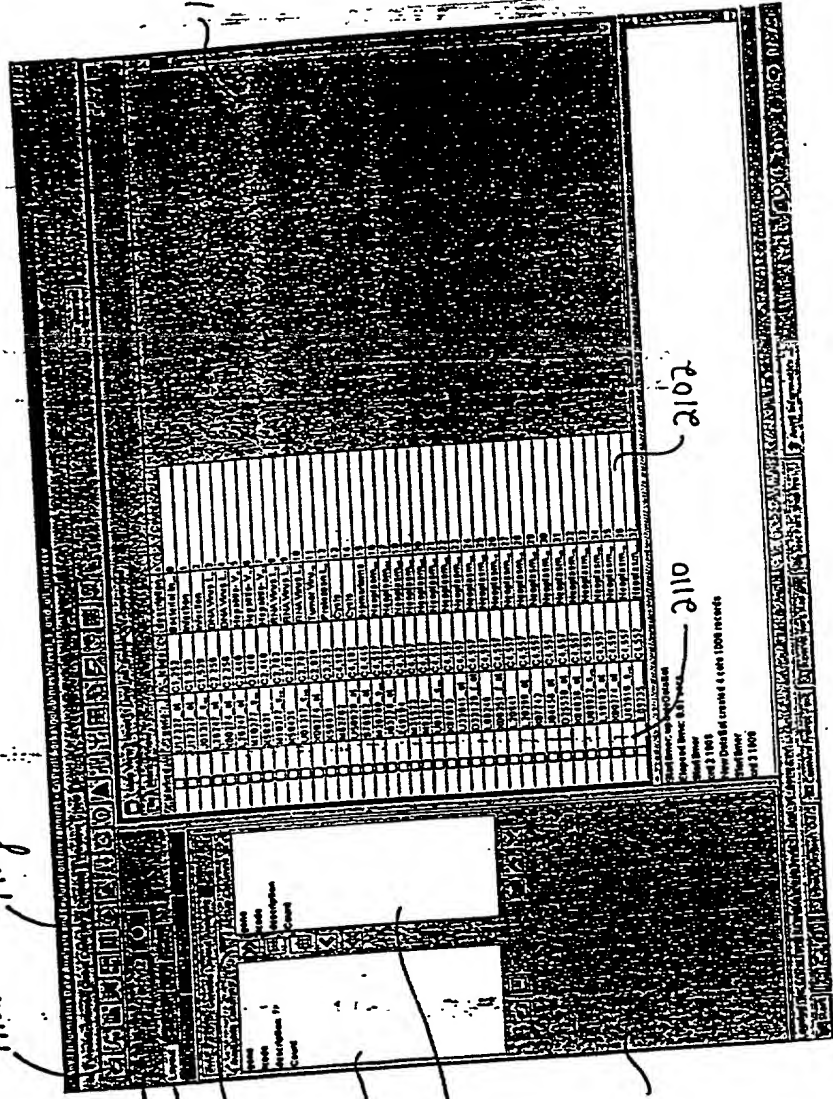


Figure 21

2174305

10077692.062402

2200

1706

1718a 1718b 1718c 1718d 1718e  
1718f 1718g 1718h 1718i 1718j

1708  
1718  
2206a  
2206b  
2206c  
2206d  
2206e  
2206f  
2206g  
2206h  
2206i  
2206j

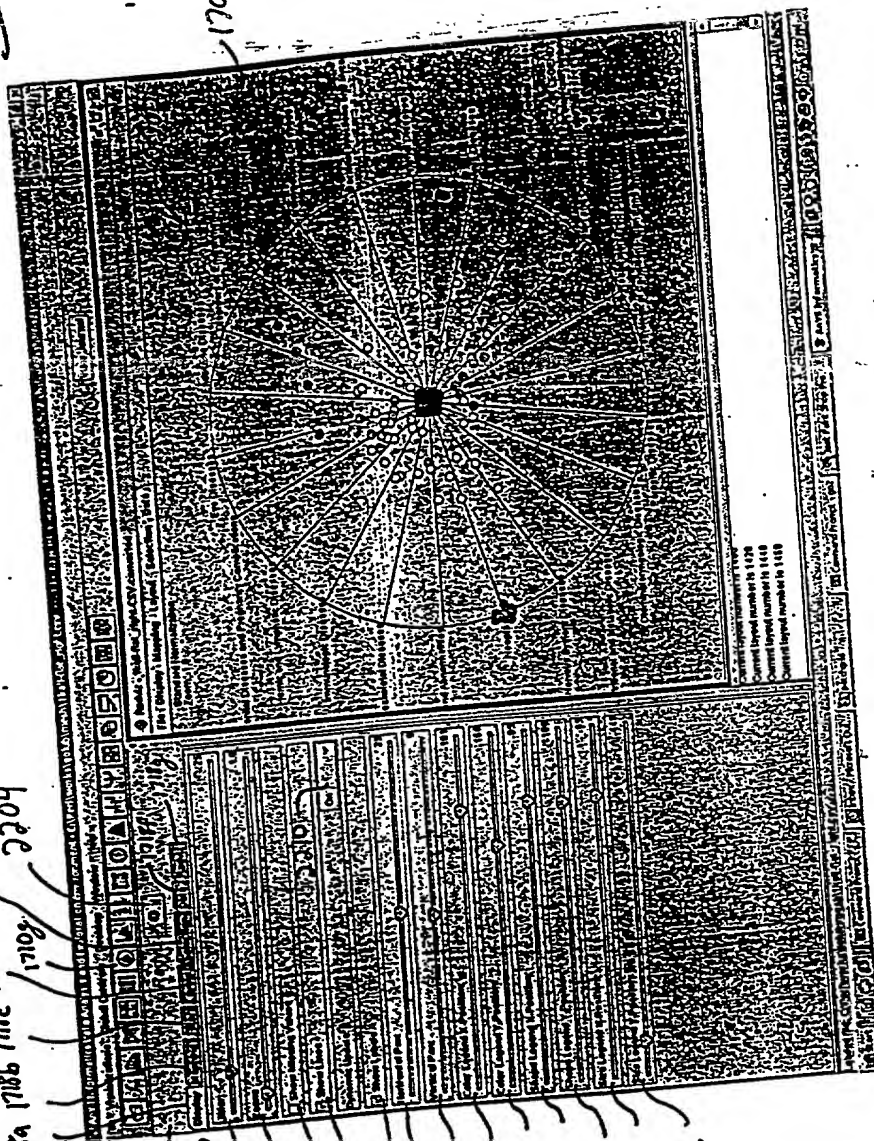


Figure 22

22181



204290" 269200T

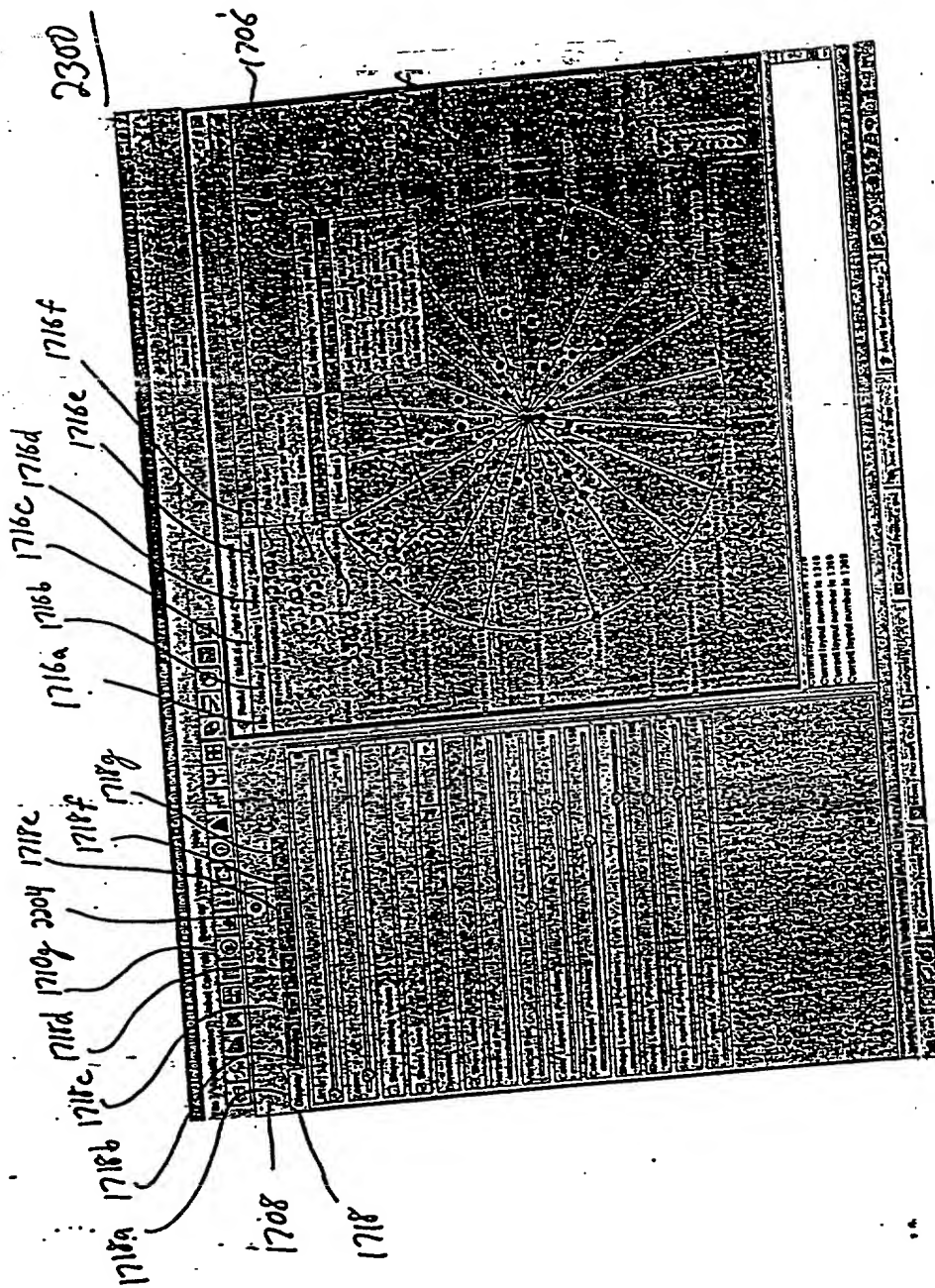


Figure 23

221871

9021-

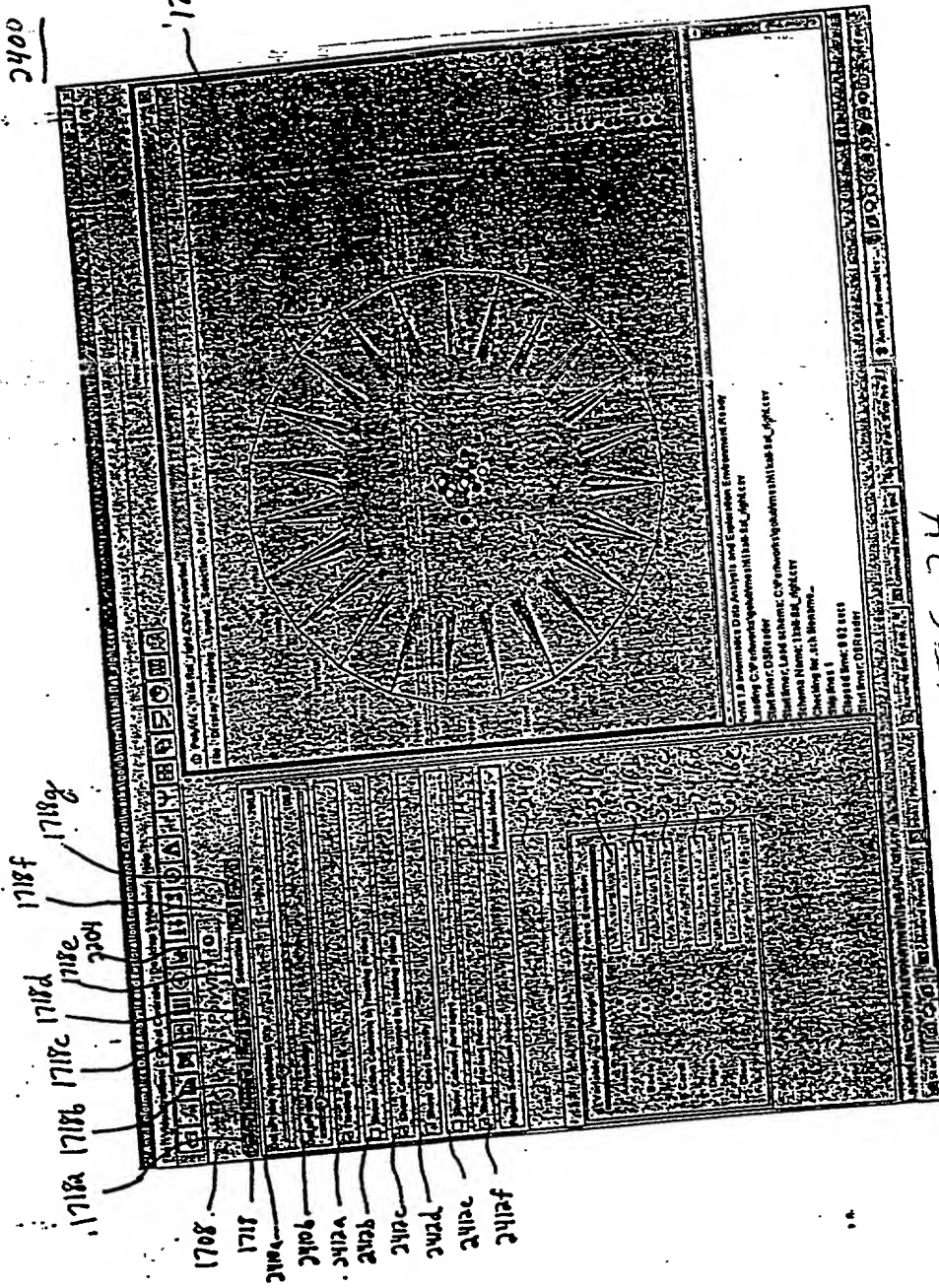


Fig 24

204290.062402

2500

17186

1706

25

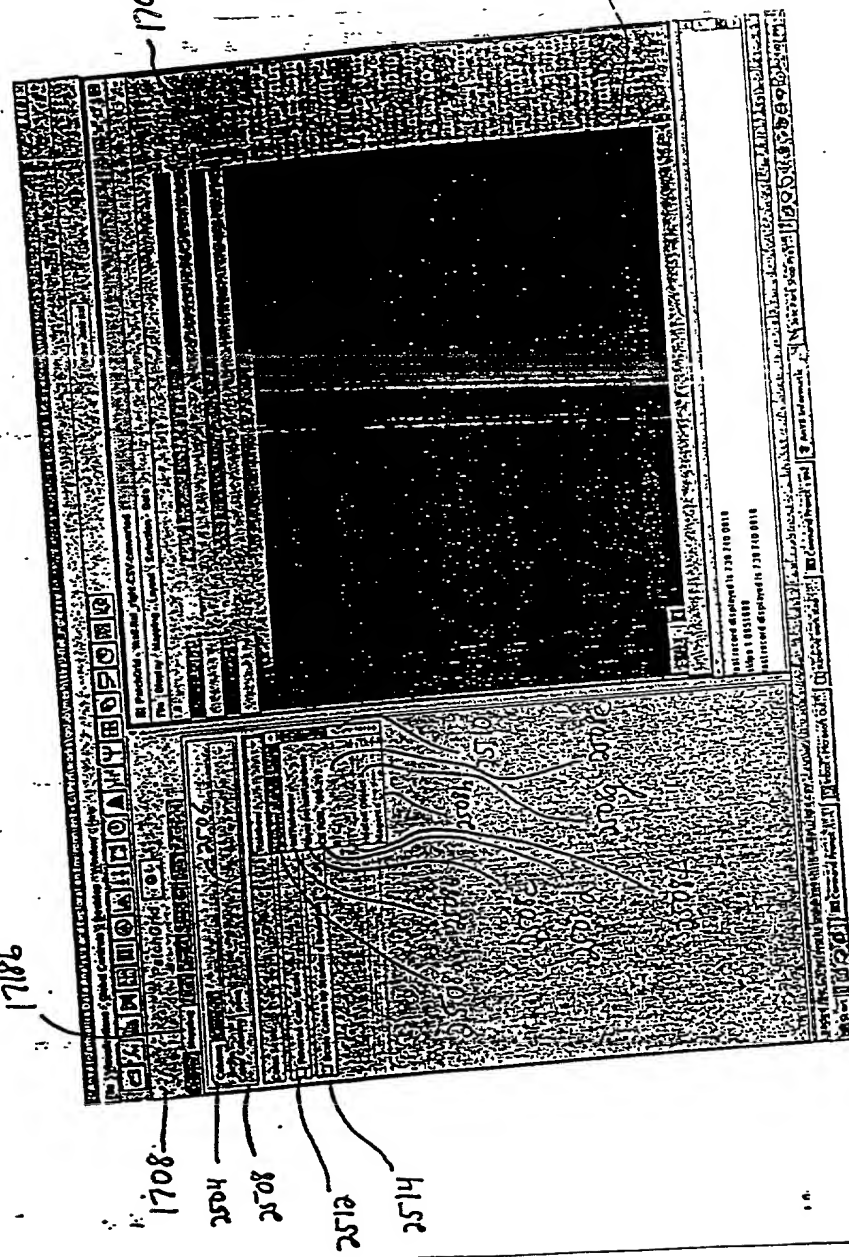


Figure 25

22189

204290 269700T

2600

2604b 2604 2604a

1708b

1708

2602

1710

1708

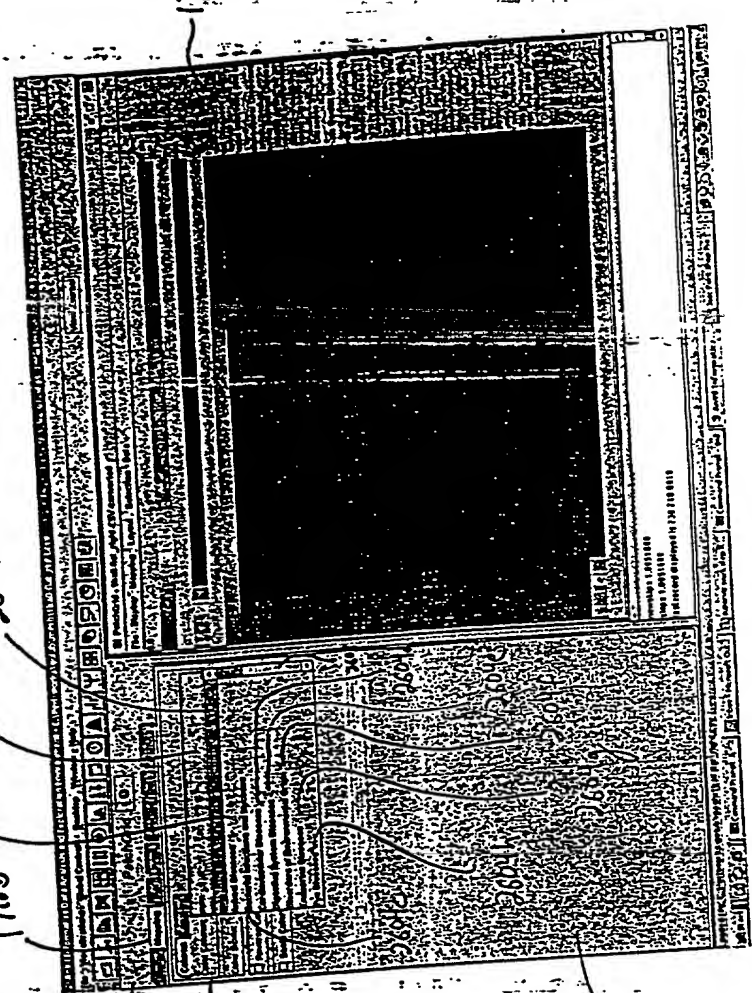


Figure 26

228917

204290-2694001

2702

1706

1718c

2702a

1708

2702

2704

2706

2708

2710

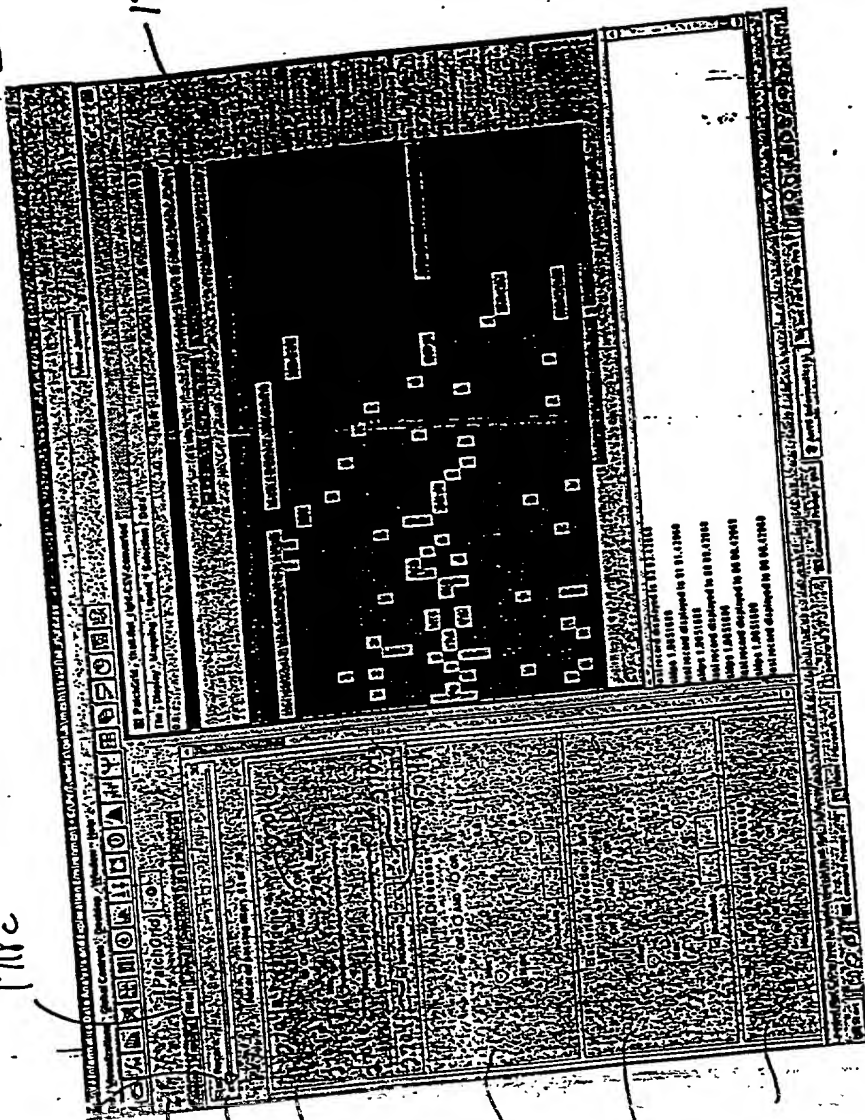
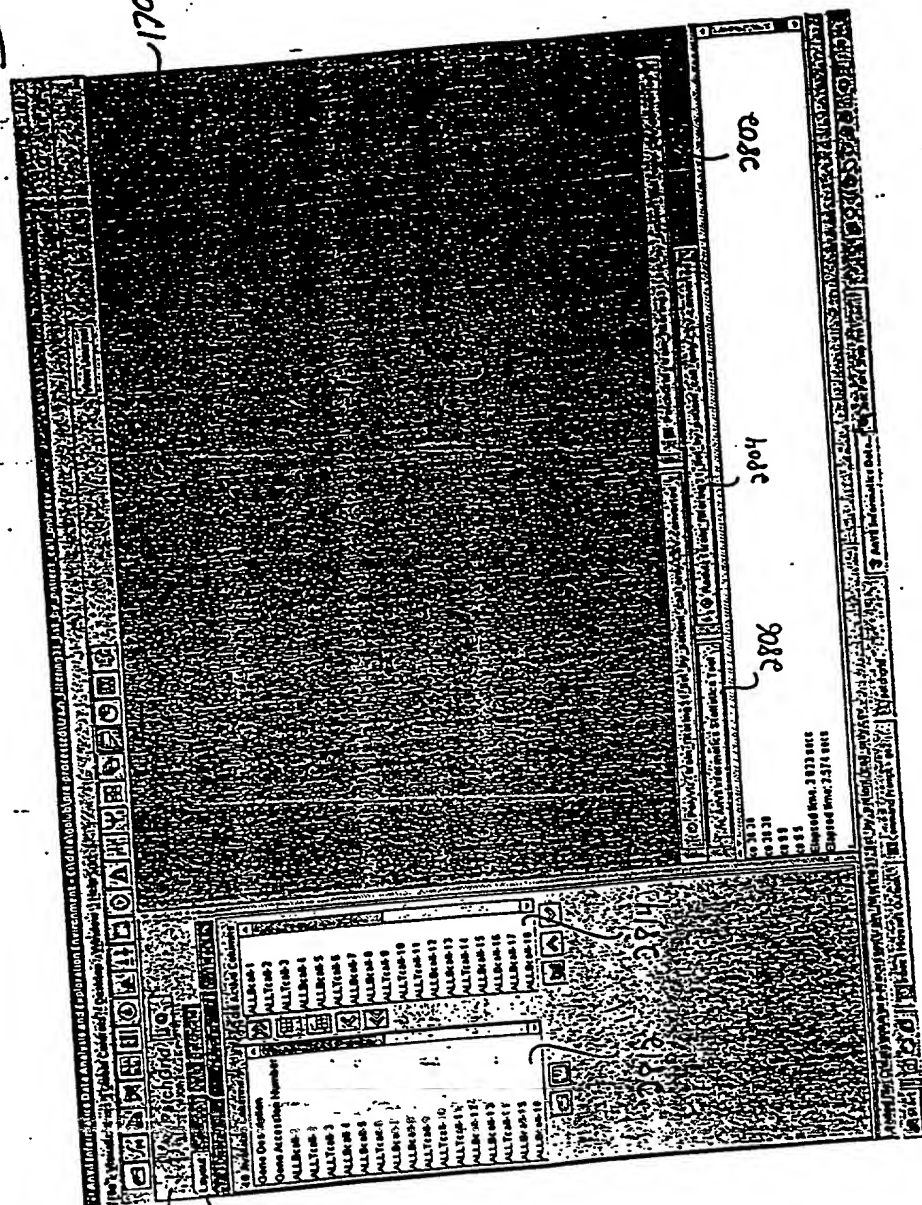


Figure 27

210917

162156



204290" 2692400T

2900

1706

2904 2204

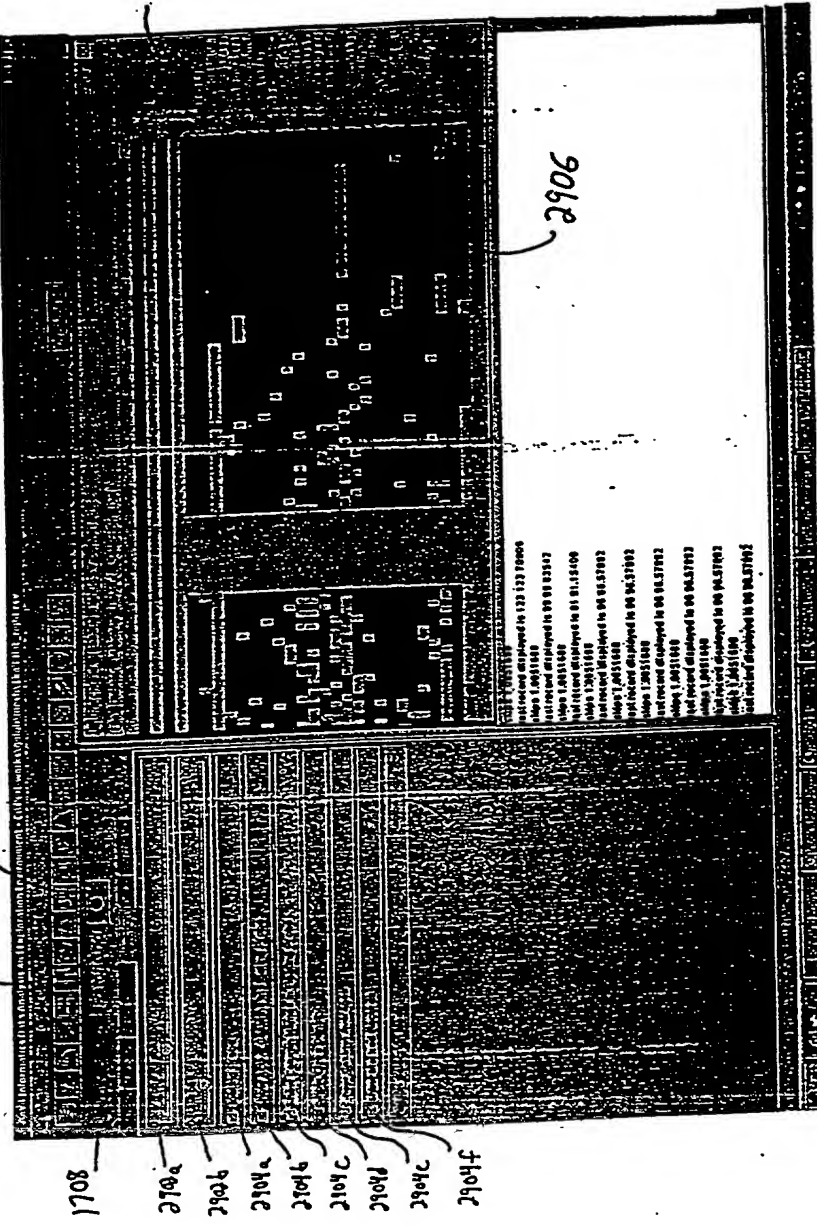


Figure 29

2171

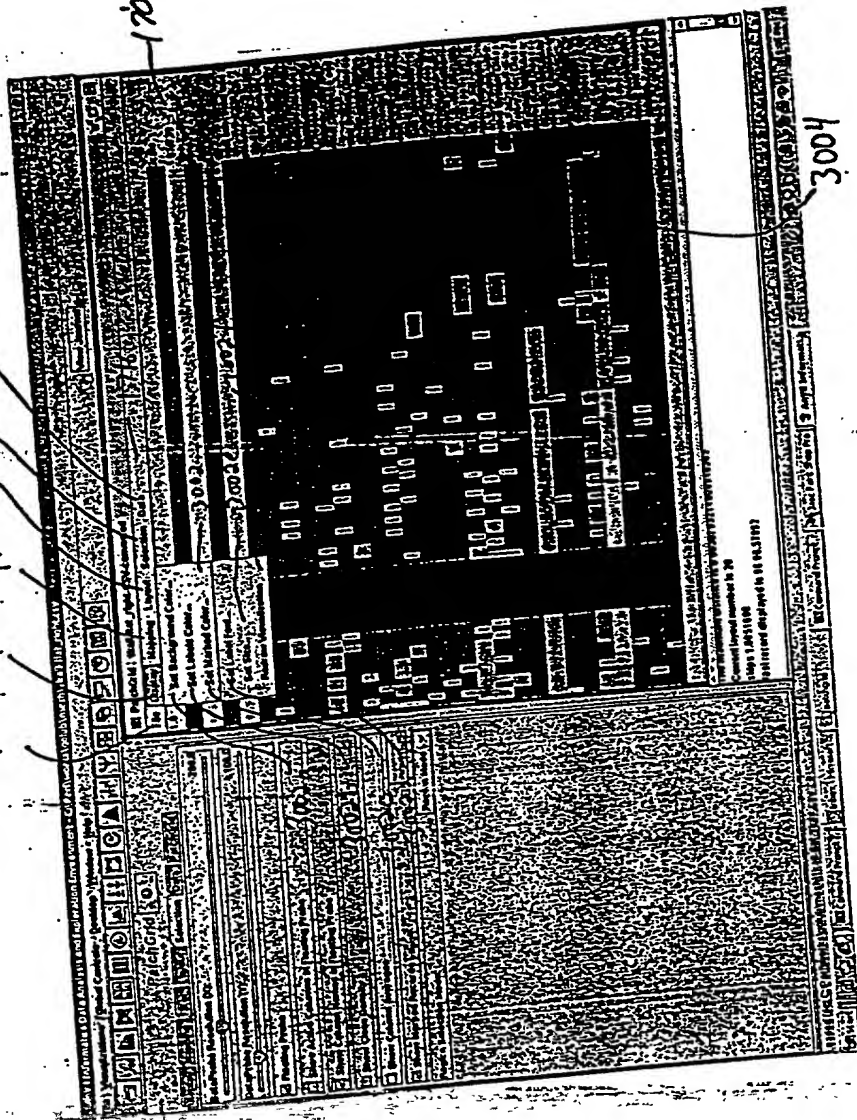


204290" 2692200T

1716d 1716e 1716f

3000

1716a 1716b 1716c



1708

3004

Figure 30

2218917



204290.269700T

3100

1716e

1706

1708

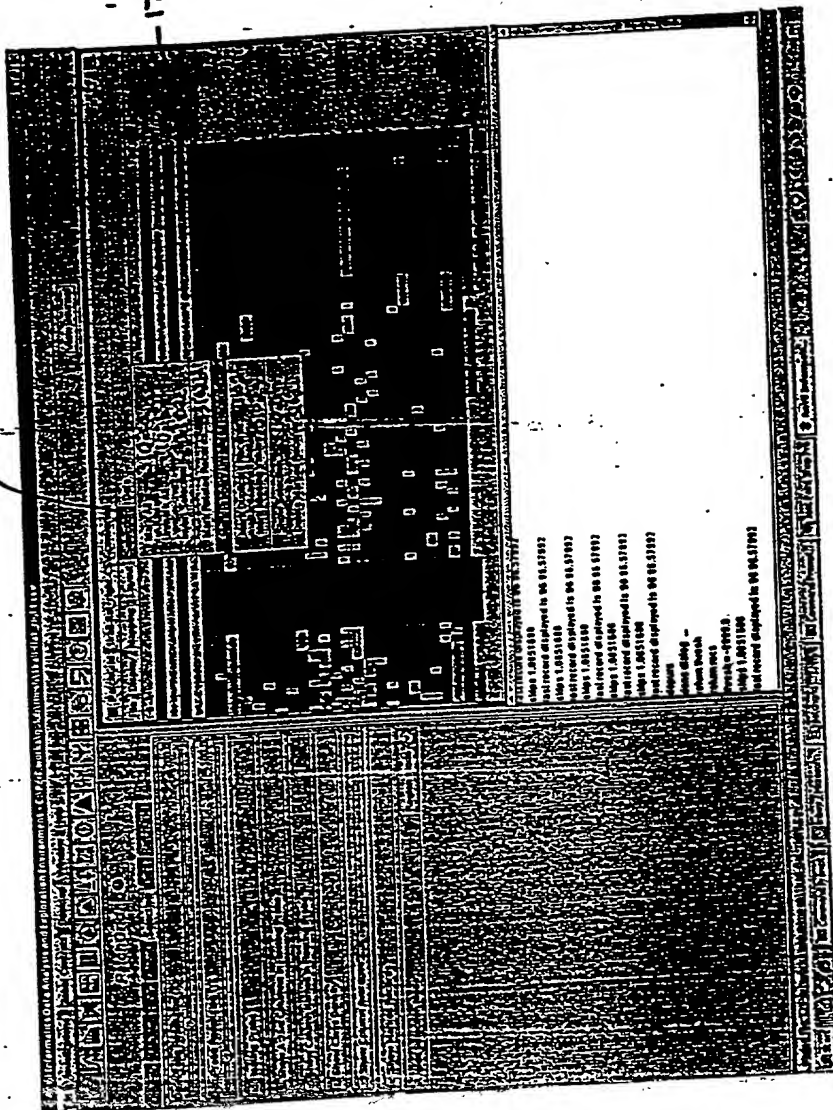


Figure 31

204290" 269400T

3200

1764

1706

1708

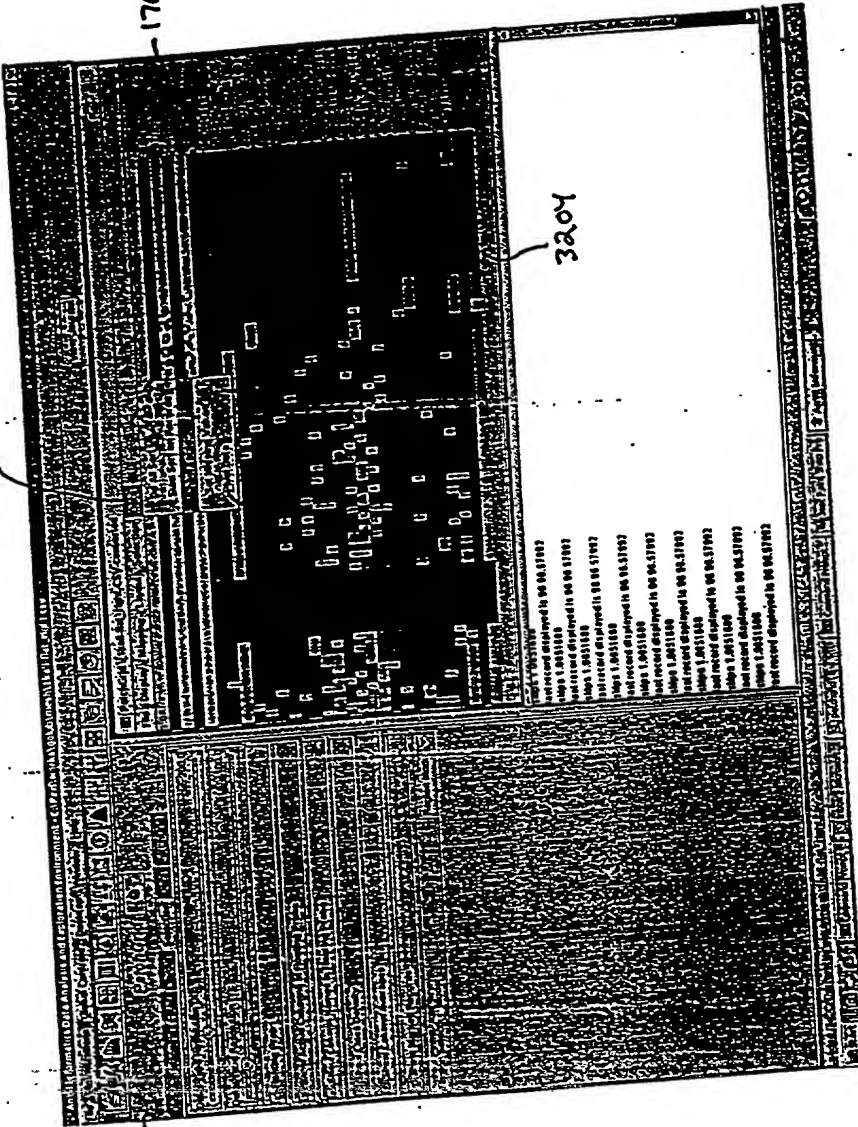
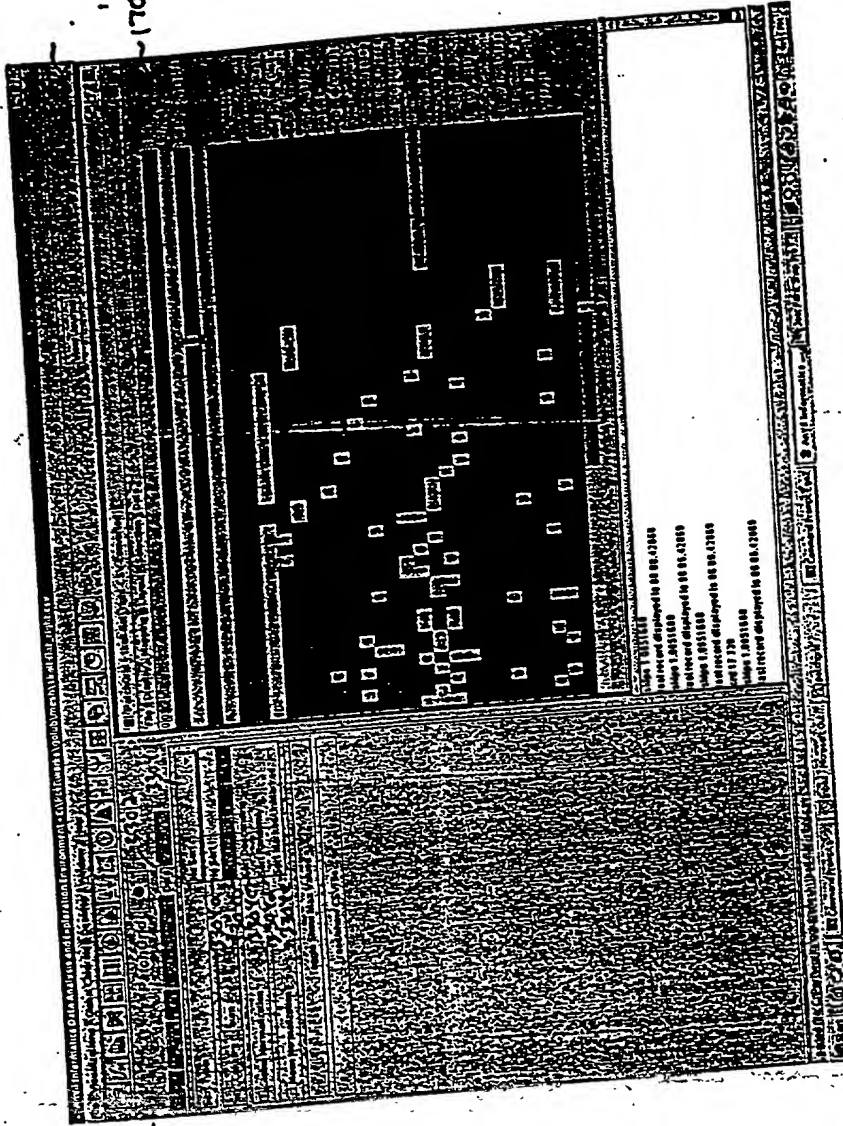


Figure 32

204290-269700T

3300

1706



1708

Figure 33

# Treatment Outcome Prediction

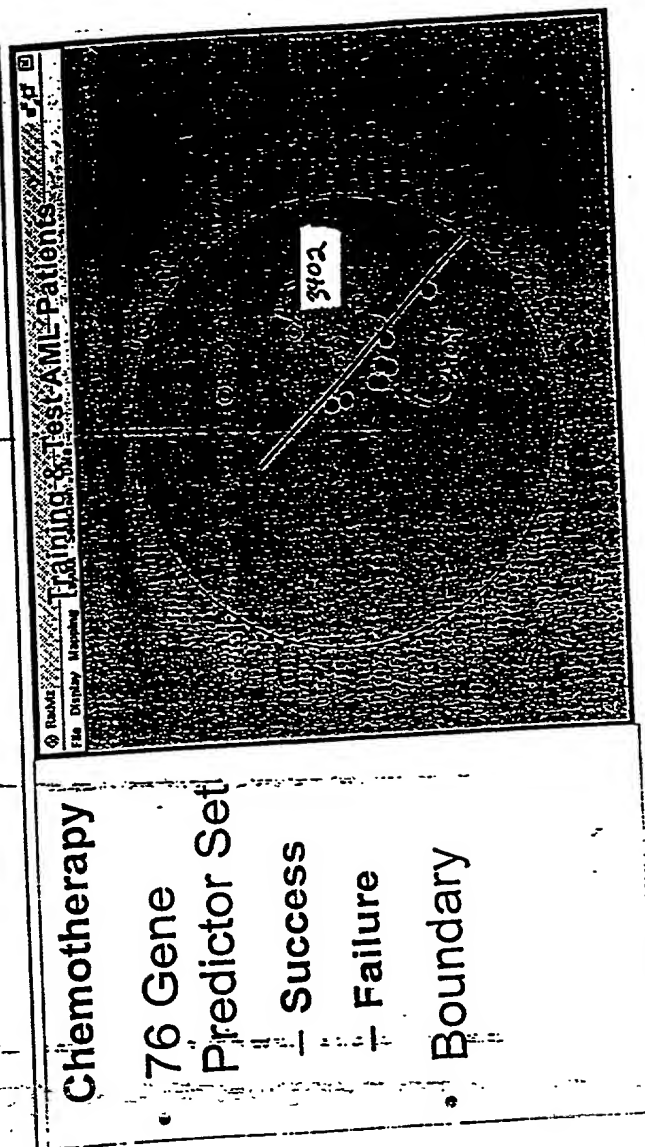


Figure 34

2259854

# Reduced Genes

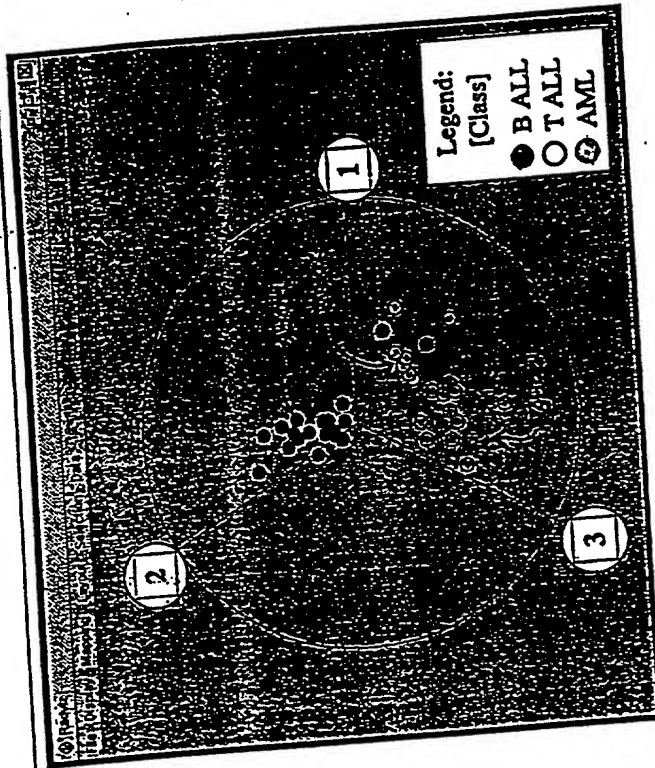


Figure 35

## Chemical Structure

Benzodiazepines

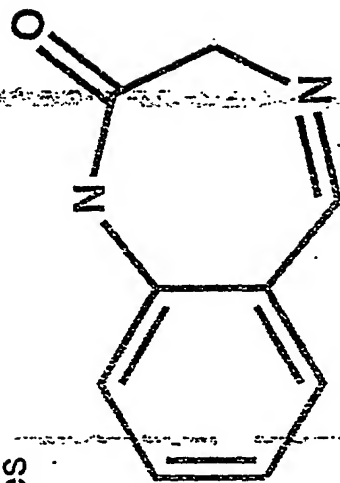


Figure 36

# Radial Visualization Showing R<sub>3</sub> Attributes

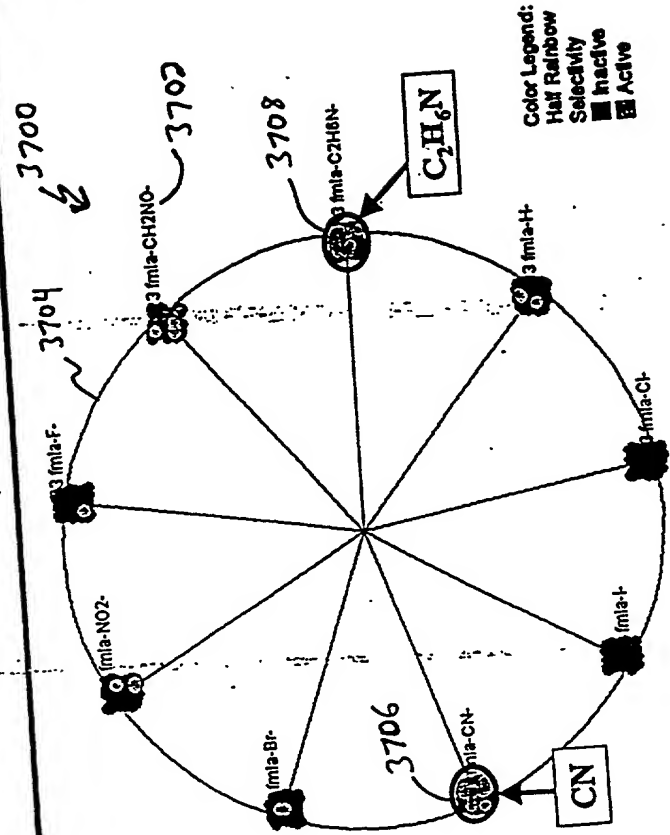


Figure 37

# Radial Visualization Showing R<sub>3</sub> & R<sub>4</sub> Attributes

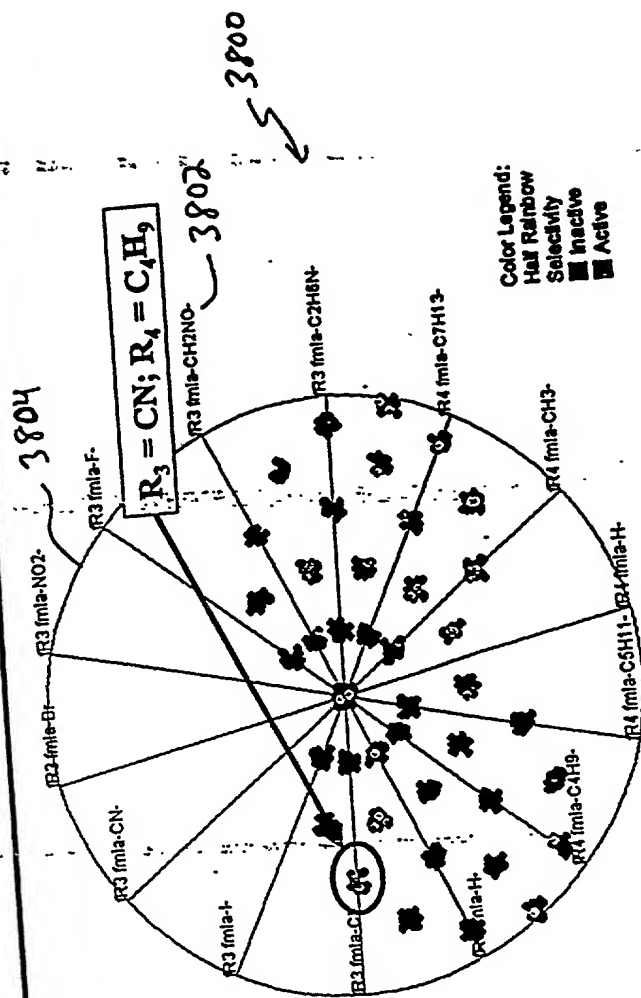


Figure 38



# Radial Visualization Showing R<sub>3</sub> & R<sub>4</sub> Attributes

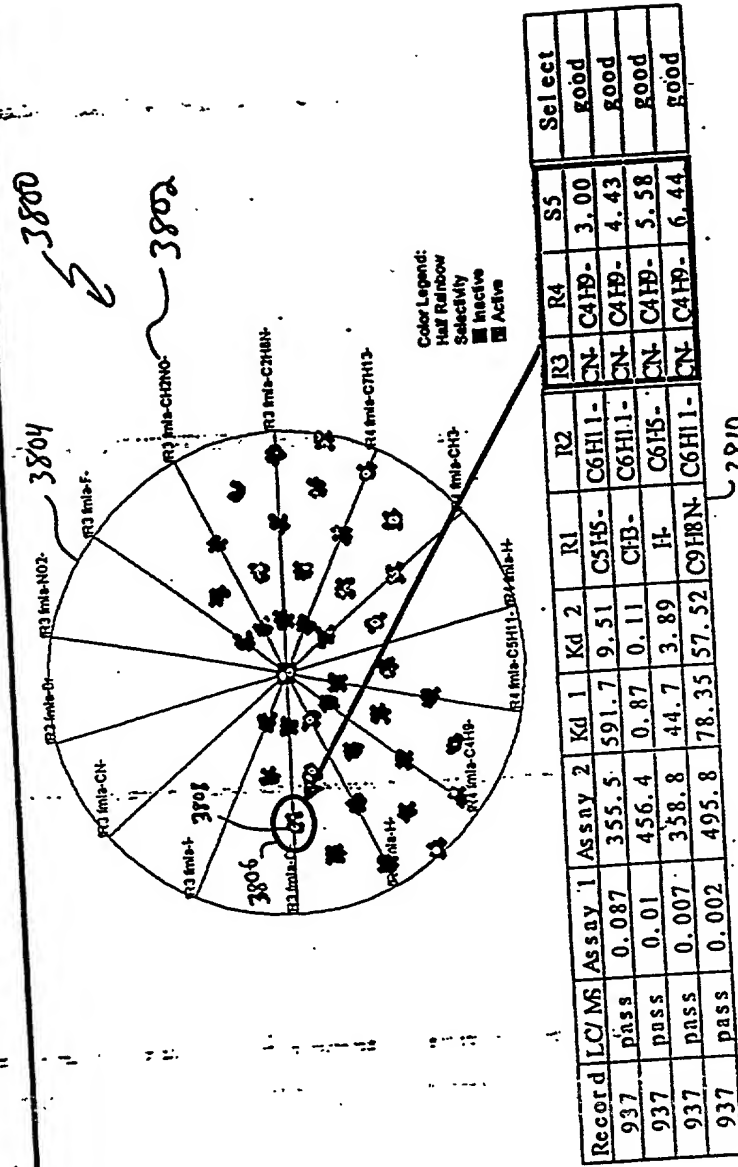


Figure 39

# Radial Visualization Showing R<sub>3</sub>, R<sub>4</sub> & S<sub>5</sub> Attributes

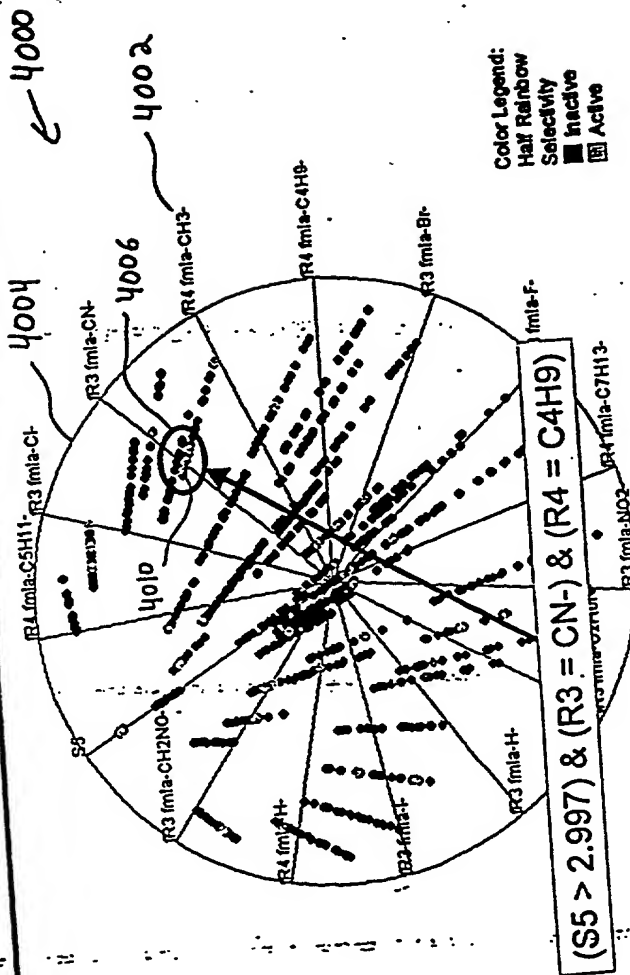


Figure 40

# Radial Visualization Showing R<sub>3</sub>, R<sub>4</sub> & S<sub>5</sub> Attributes

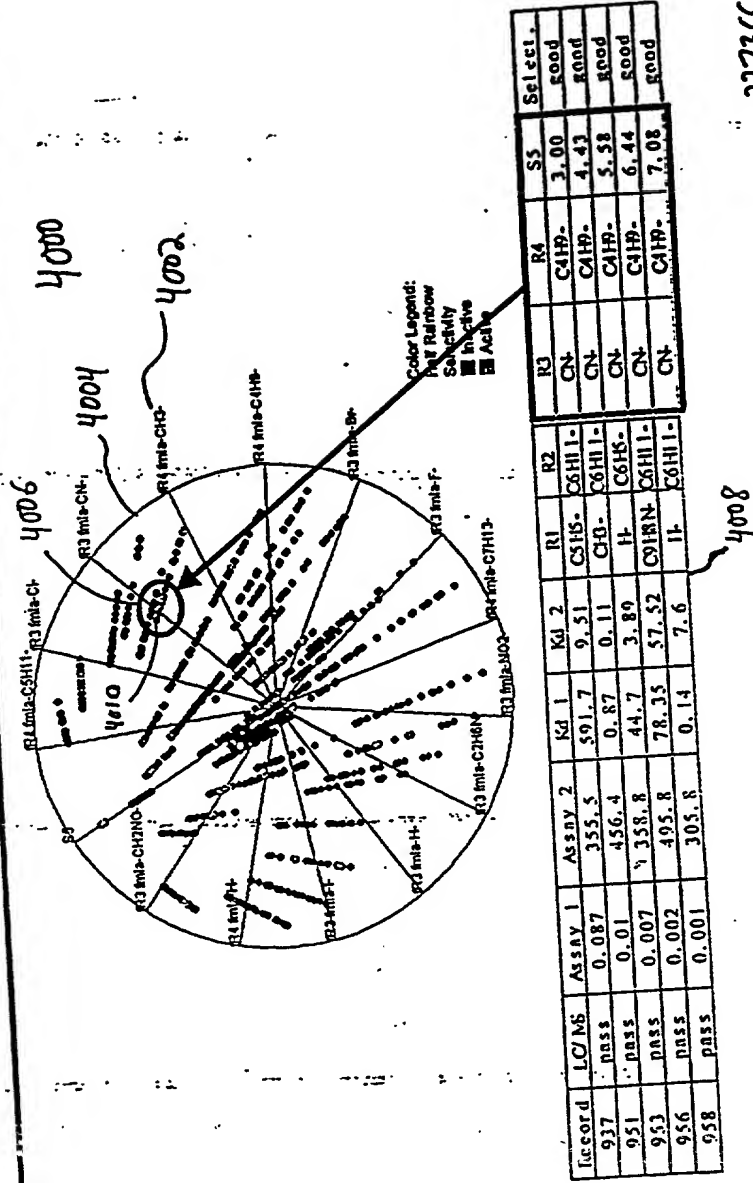


Figure 41

2273661

# Pearson Cross Correlations

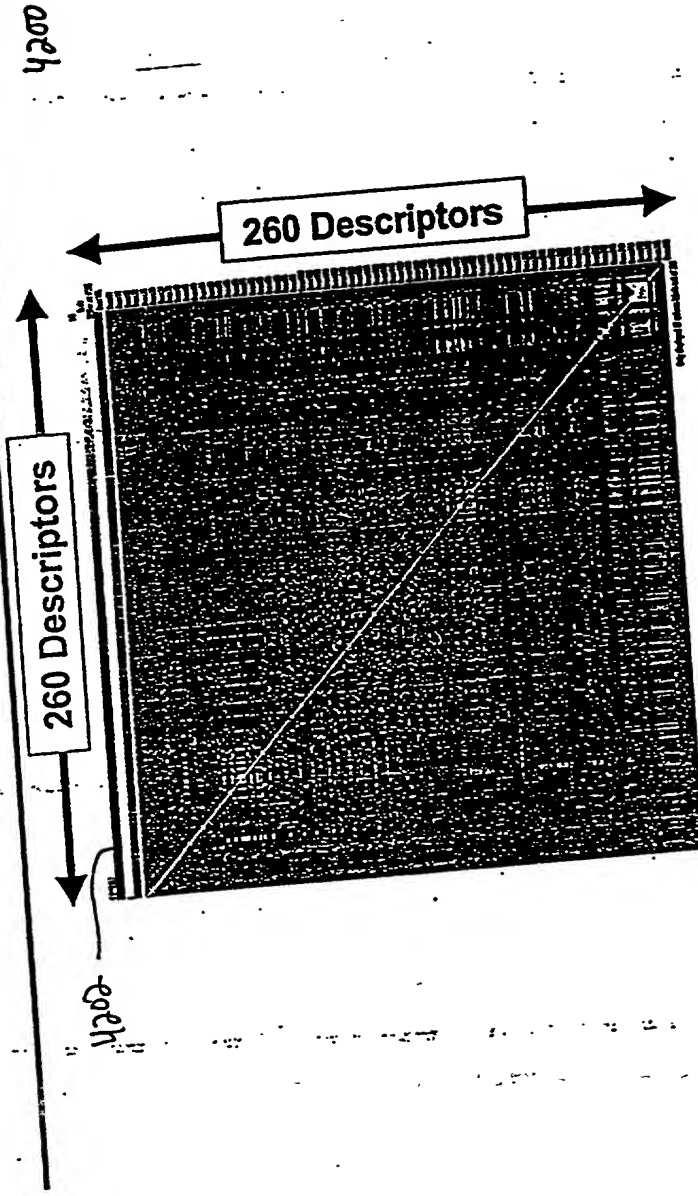


Figure 42

# ISIS Keys

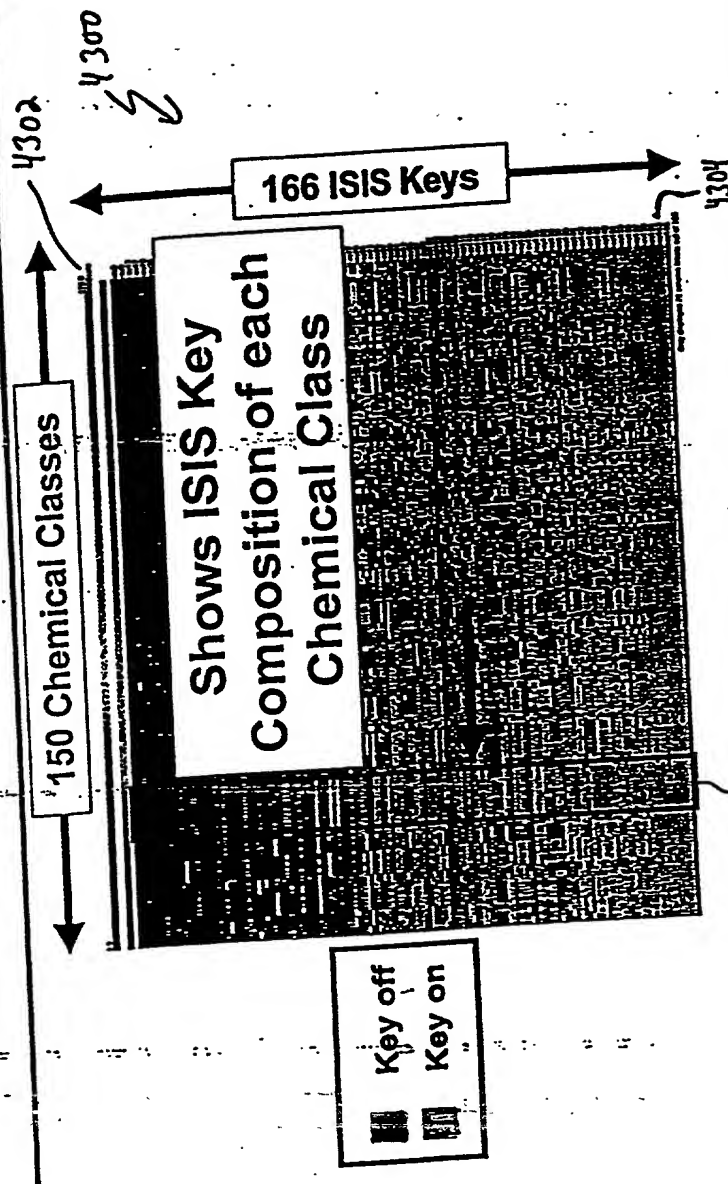


Figure 43

2273661

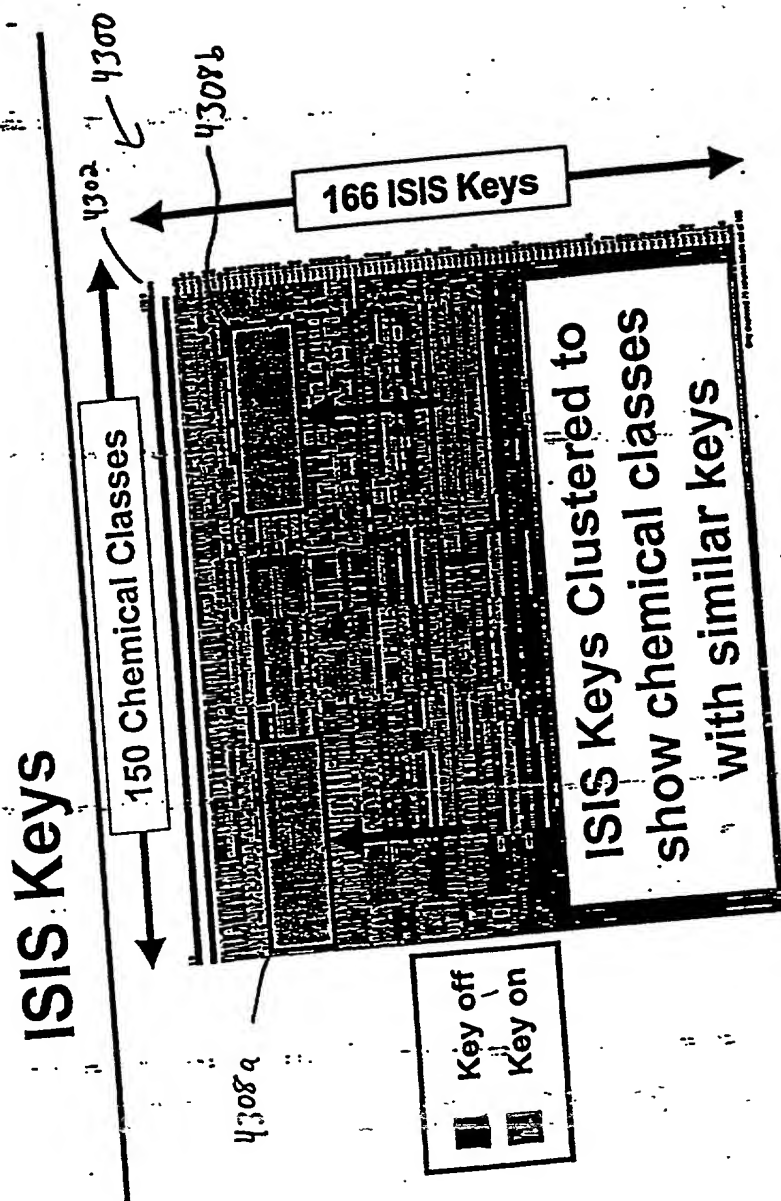


Figure 44

# Association Rules - Visually

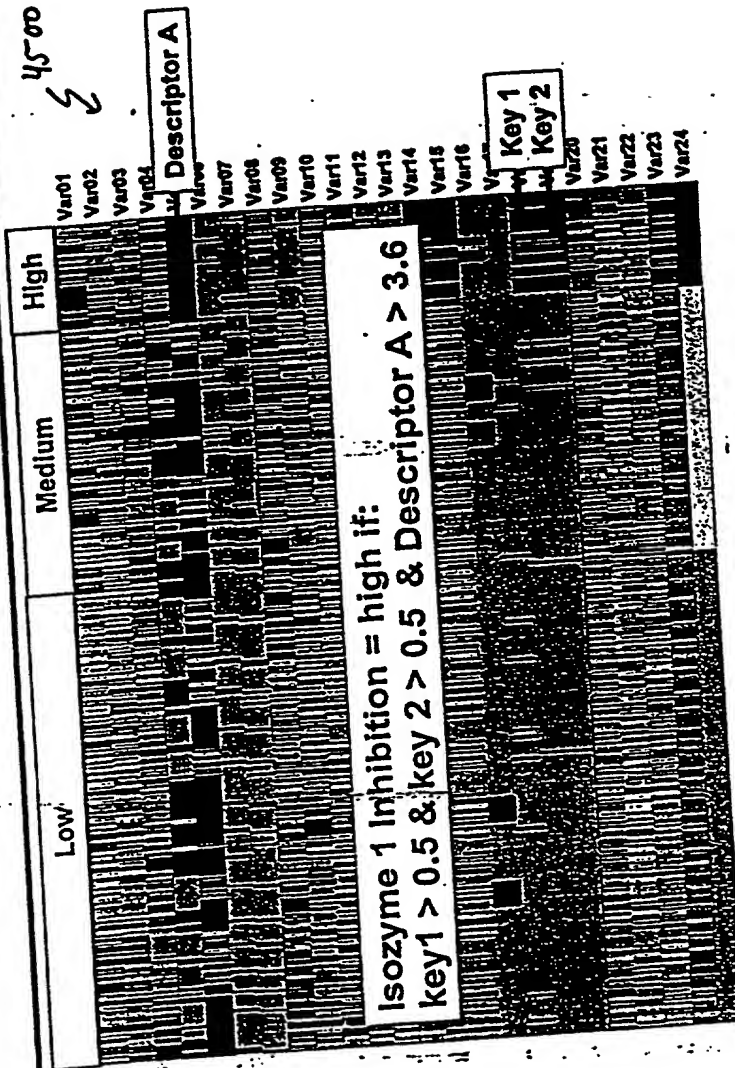


Figure 45

# Exploratory Overview

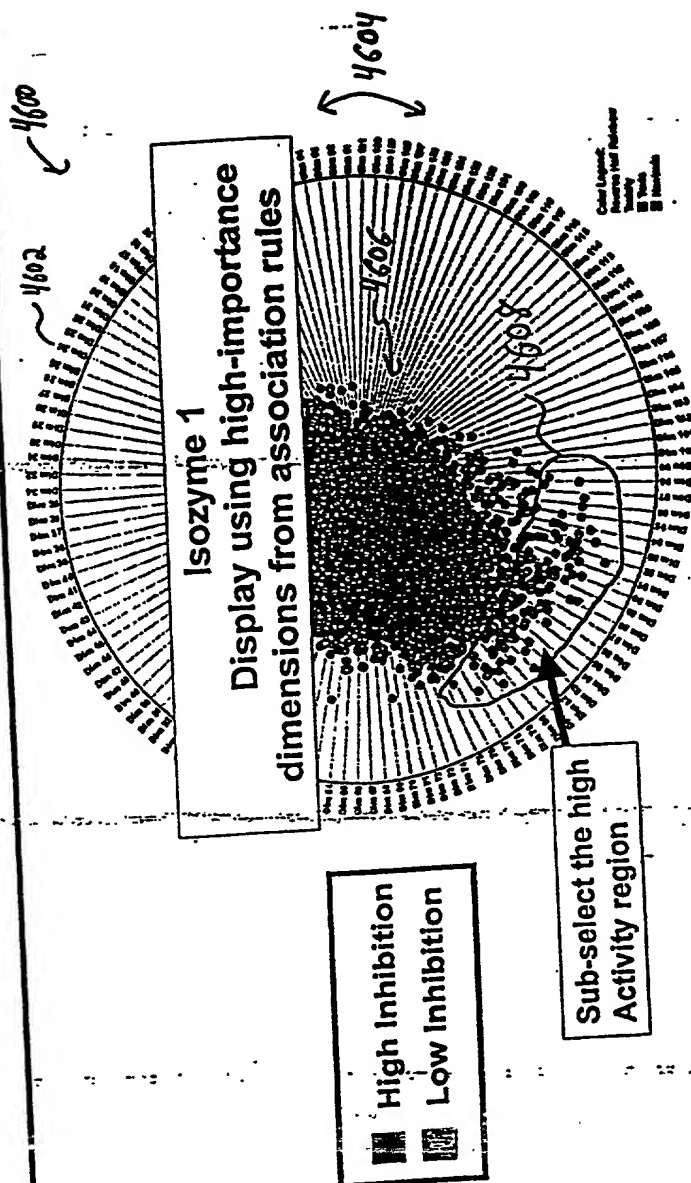


Figure 46



# Toxic Distinction

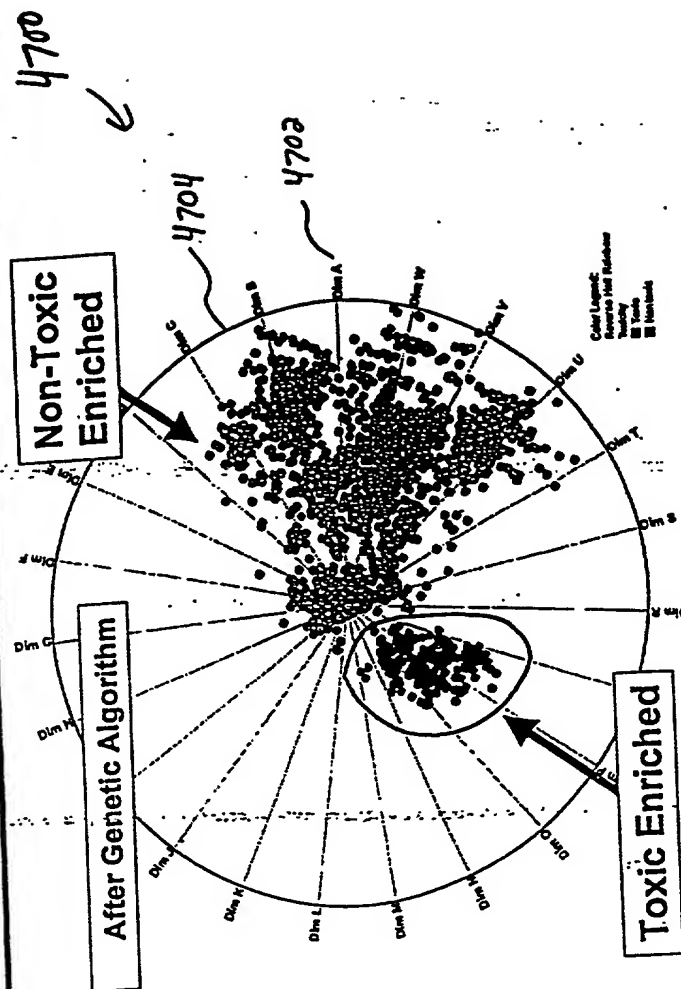


Figure 47

# Toxic Distinction

After AP Algorithm

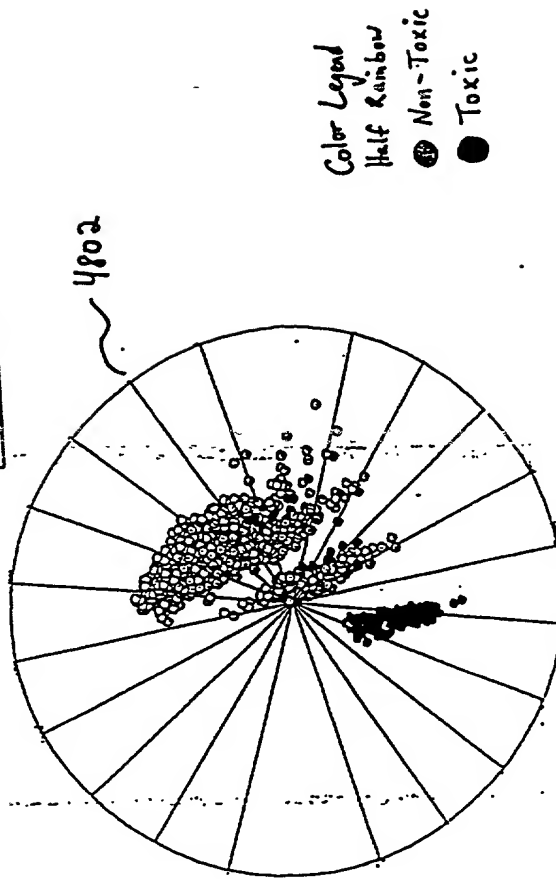


Figure 48

2073661

10077692-054402

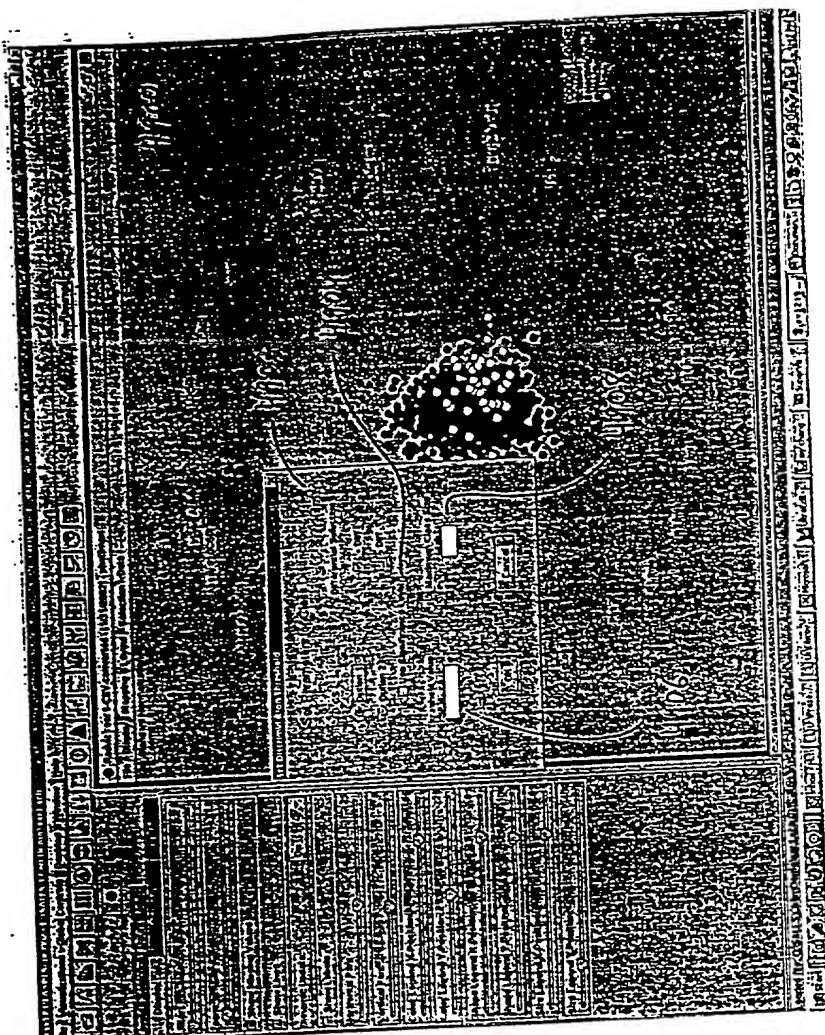


Figure 49